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## ARIS/CI<sup>®</sup> check-in counter allocator

### Plan and manage your check-in counter assignments

The ARIS/CI check-in counter allocator creates check-in counter assignment plans based on flight-schedule information and business rules, and then adjusts those plans on the day of operation in response to flight-schedule changes and unanticipated events. The ARIS/CI check-in counter allocator receives flight-schedule information from the ARIS/SmartBase<sup>®</sup> database, which stores flight schedules entered by the ARIS/SB<sup>®</sup> schedule builder, or via SMA files and IATA SSIM Chapter 7-compliant schedule files from other systems.

With the ARIS/CI check-in counter allocator, you can:

- Determine how many check-in and ticket counters you need to handle passengers, based on flight schedule, aircraft size, passenger load, type of flight, class of service, and defined passenger-arrival patterns
- Handle the need for contiguous check-in and ticket counters that vary in number over time
- Handle code shares and alliances
- Create allocation plans that ensure the most efficient use of your check-in and ticket counters
- Create allocation plans for proposed flight schedules and resolve conflicts before the flight schedules become active
- Adjust allocations in response to flight-schedule changes
- Update check-in counter and ticket displays automatically
- Improve passenger satisfaction by minimizing check-in delays and congestion

## Produces long-term plans

When you use the ARIS/CI check-in counter allocator as a long-range planning tool, you can determine if check-in counter capacity is sufficient to accommodate proposed flight schedules, well in advance of the time the schedules become active. In cases where you identify conflicts, you can use the ARIS/CI check-in counter allocator to evaluate alternative solutions, including possible adjustments to flight schedules or to the allocation rules.

The ARIS/CI check-in counter allocator can adapt check-in and ticket counter plans to compensate for short-term changes in airport operations, such as temporary closures of check-in and ticket counters or access areas due to construction.

## Adjusts plans on the day of operation

The ability of the ARIS/CI check-in counter allocator to manage check-in and ticket counter allocation on the day of operation minimizes the effect changes in flight schedules and other unanticipated events can have on checking in passengers. You can reallocate check-in and ticket counters to create the most effective arrangement before problems arise. For example, the ARIS/CI check-in counter allocator can load the daily flight schedule early in the morning and detect possible check-in and ticket counter conflicts due to the addition of charter flights, changes in departure times, changes in aircraft, and flight cancellations. It can then recommend ways to avoid conflicts by reducing allocations equitably.

## Balances airline preferences with airport check-in facilities

To create allocation plans, the ARIS/CI check-in counter allocator relies on flight schedule information and business rules containing airline and airport preferences for check-in and ticket counter allocation. You enter and store the business rules in the ARIS/SmartBase database, such as, for example, rules about an airline's preferences for scheduling check-in and ticket counter open and close times in response to various operating conditions and situations. The ARIS/CI check-in counter allocator automatically produces a check-in counter allocation plan that represents the best balance between airline needs and airport resources. When airline needs exceed capacity, the ARIS/CI check-in counter allocator identifies ways to reduce the use of check-in and ticket counter space equitably across all flights.

The ARIS/CI check-in counter allocator supports an almost unlimited range of possible allocations of flights to check-in and ticket counters. For example, you can request check-in and ticket counters without regard to flight schedules, and you can group flights in arbitrary ways to balance passenger loads throughout terminals.

The ARIS/CI check-in counter allocator stores check-in and ticket counter allocation information in the ARIS/SmartBase database, and you can send the information through the ARIS/SmartBus® communication middleware to public-information displays so passengers know which flights are assigned to which check-in and ticket counters.

## Representative features

**Automatic allocation planning and manual adjustment on the day of operation.** The ARIS/CI check-in counter allocator automatically converts requests for check-in and ticket counters into allocation plans, proposing equitable conflict resolutions when requests for check-in and ticket counters exceed available check-in facilities. You can adjust plans in response to changes in flight schedules and other unanticipated events on the day of operation.

**Handle multiple check-in counter allocations as one assignment.** The ARIS/CI check-in counter allocator handles an allocation as a group of check-in and ticket counters that can change in number over time. The system also understands that check-in and ticket counters assigned to each carrier must be contiguous, thus avoiding gaps that can lead to inefficient utilization.

**Intuitive graphical user interface.** The ARIS/CI check-in counter allocator displays an up-to-the-minute view of check-in and ticket counter allocations in a bar chart. Allocations can have complex shapes to represent varying demand for check-in and ticket counters over time, typically starting with a few check-in and ticket counters well before departure time and increasing in number as departure time nears. The product fits the allocations together like pieces of a puzzle to ensure check-in and ticket counters are used efficiently. When allocations exceed capacity, the ARIS/CI check-in counter allocator reduces the allocations equitably.

**Customizable user interface.** You can customize the user interface colors to represent a variety of information, such as, for example, specific flights, sets of flights, specific country, sets of countries, specific airline, sets of airlines, allocation conflicts, possible congestion due to under-allocation, and handling agent identity.

**Visual alerts warn about problems.** The ARIS/CI check-in counter allocator identifies and resolves conflicts automatically. Visual alerts warn you when a request for check-in and ticket counters cannot be accommodated and the amount by which the allocation falls short of the requested number of check-in and ticket counters.

**Multi-user access.** If you have multiple users, changes made by one user are seen by all other users within a few seconds. This makes it possible to control check-in and ticket counter allocation from different locations.

**What-if analyses.** When you load a particular day—current, future, or past—the ARIS/CI check-in counter allocator automatically assembles the business rules and airport configuration for that day. This feature is particularly useful when airport construction causes check-in and ticket counter areas to change. You can also enter alternative rules and see the effect on the allocation.

**Customer-service staff allocation.** The ARIS/CI check-in counter allocator can coordinate check-in and ticket counter allocation decisions with staff-allocation plans created by the Ascent WorkZone® workforce-management system to ease passenger congestion at check-in areas. The ARIS/IQ® queue manager calculates how many check-in counters needed as a function of time to provide a smooth flow of passengers through the check-in area. By looking at arrival rates and performance standards, it determines the most effective way to process all the passengers that need assistance while avoiding overstaffing situations.

**Collaborative decision-making.** The ARIS/CI check-in counter 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/CI check-in counter 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/CI check-in counter allocator, using a standard browser, such as the Google Chrome™ browser, 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.

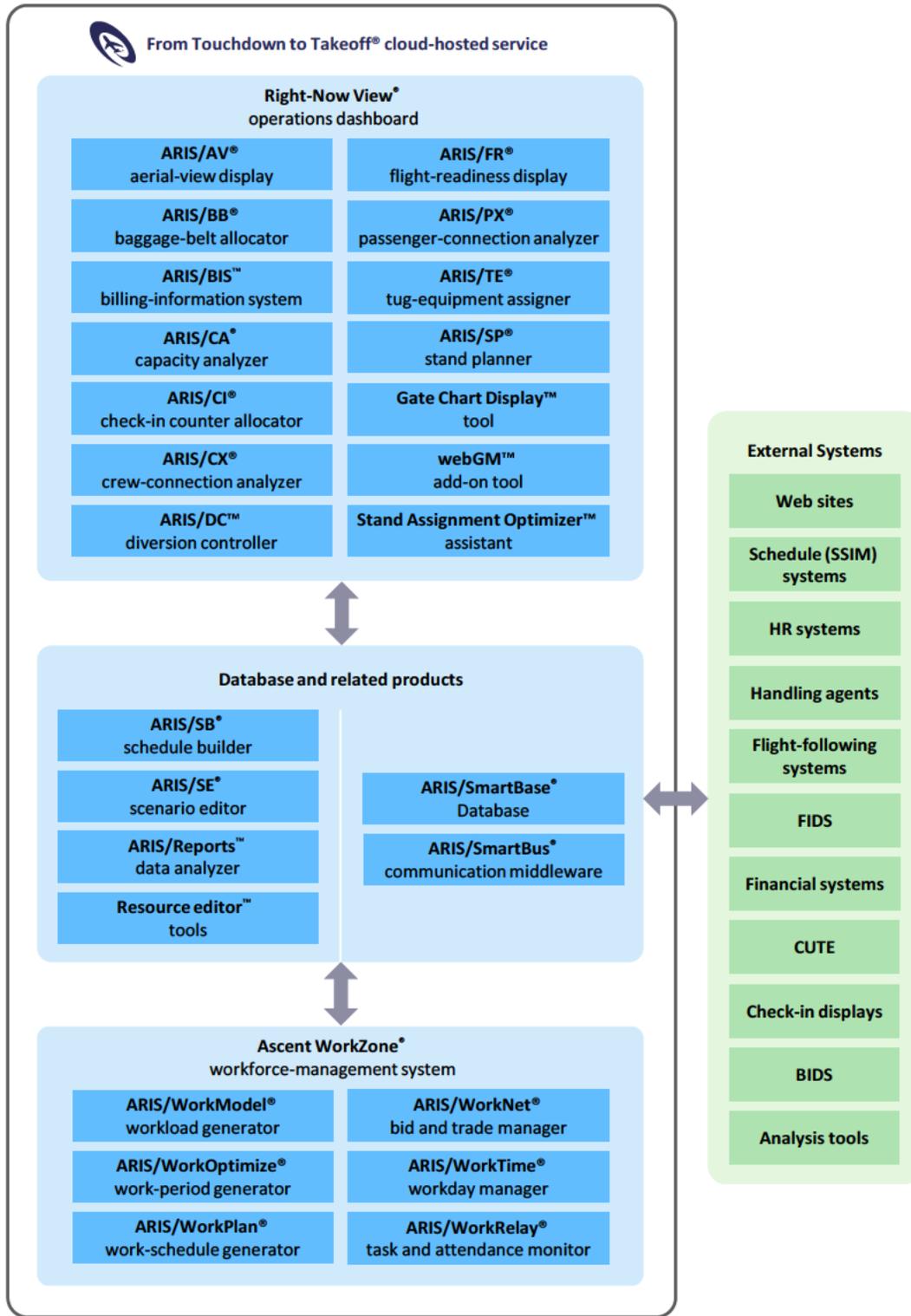
**Training services.** Ascent offers a wide range of user, administrator, trainer, and refresher training classes at your location, at Ascent's Boston, MA, headquarters, and remotely over the web. Ascent also offers operational training services remotely when you begin to use an Ascent solution in production.

**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](mailto: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 style="list-style-type: none"> <li>Location Editor™ tool</li> </ul>	Manages the location hierarchy and records used to plan, schedule, and manage workload, workers, and tasks
<ul style="list-style-type: none"> <li>Planning Control™ tool</li> </ul>	Manages work-schedule planning
<ul style="list-style-type: none"> <li>Profile Editor™ tool</li> </ul>	Manages passenger-arrival profiles for departure flights
<ul style="list-style-type: none"> <li>Reference Editor™ tool</li> </ul>	Manages reference-information records that determine how the Ascent Technology products, applications, and tools behave
<ul style="list-style-type: none"> <li>Rule Editor™ tool</li> </ul>	Manages scenarios, rule groups, and rules for workforce management
<ul style="list-style-type: none"> <li>Template Worker Editor™ tool</li> </ul>	Manages template worker records used to plan workload
<ul style="list-style-type: none"> <li>Update Control™ tool</li> </ul>	Manages settings that block external systems from updating information in specified database fields
<ul style="list-style-type: none"> <li>User Editor™ tool</li> </ul>	Manages user access to the products, applications, and tools
<ul style="list-style-type: none"> <li>User Group Editor™ tool</li> </ul>	Manages user-group access to pre-set configurations and automated distribution of email and messages
<ul style="list-style-type: none"> <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

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

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, SmartAirline Information Manager, SmartAirline Operations Center, 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.

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