ASCENT TECHNOLOGY, INC.

ARIS/CI® check-in counter allocator

Ascent Technology, Inc.
Building 200
One Kendall Square
Cambridge, MA 02139-1589 USA
Telephone: +1.617.395.4800
email: sales@ascent.com
www.ascent.com

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, 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® database, which stores flight schedules entered by the ARIS/SB® 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 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 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 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 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 counter plans to compensate for short-term changes in airport operations, such as temporary closures of check-in 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 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 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 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 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 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 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 counters. For example, you can request check-in 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 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 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 counters into allocation plans, proposing equitable conflict resolutions when requests for check-in 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 counters that can change in number over time. The system also understands that check-in counters assigned to each carrier must be contiguous, thus avoiding gaps that can lead to inefficient use of check-in counters.

Who we are

Since our founding more than 30 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.

Intuitive graphical user interface. The ARIS/CI check-in counter allocator displays an up-to-the-minute view of check-in counter allocations on a bar chart. Allocations can have complex shapes to represent varying demand for check-in counters over time, typically starting with a few check-in 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 counters are used effectively. When allocations exceed capacity, the ARIS/CI check-in counter allocator reduces the allocations equitably.

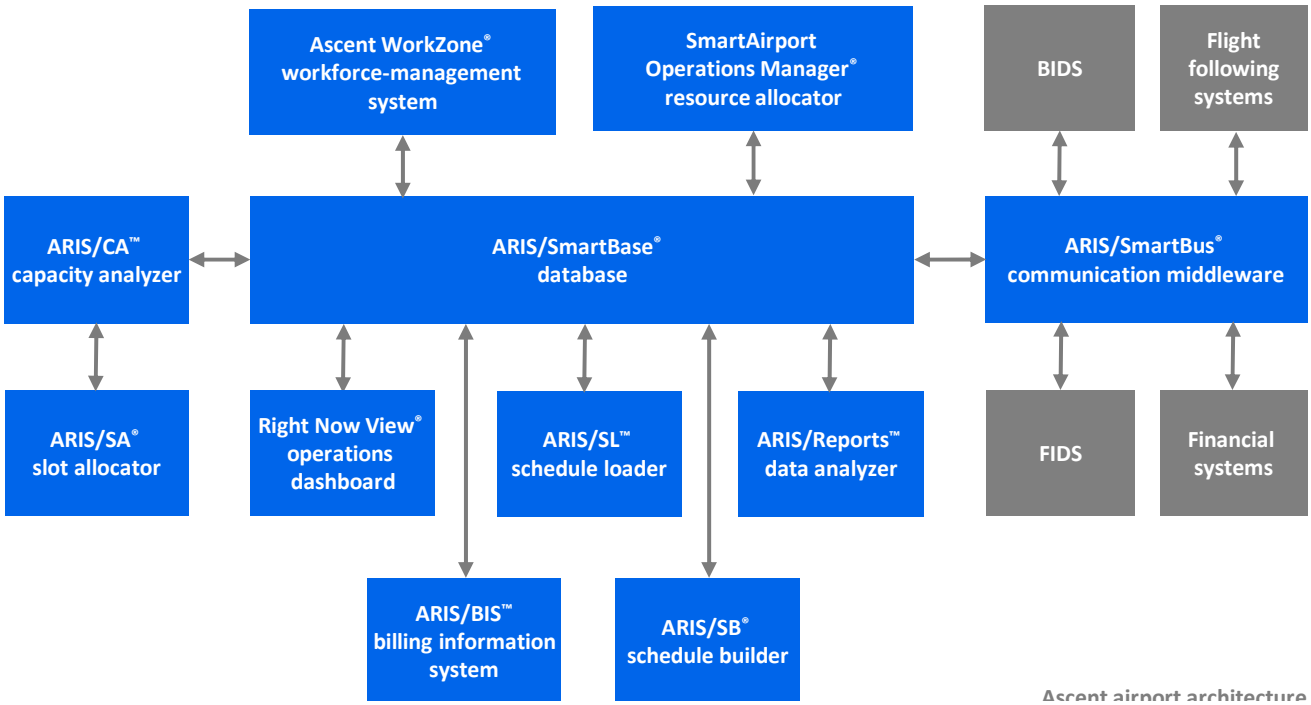
Customizable user interface. You can customize the user interface colors to represent a variety of information, such as, for example, specific flights, sets of flights, specific country, sets of countries, specific airline, sets of airlines, allocation conflicts, possible congestion due to under-allocation, 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 counters cannot be accommodated and the amount by which the check-in counter allocation falls short of the requested number of check-in 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 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 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 counter allocation decisions with staff-allocation plans created by the Ascent WorkZone® workforce management system to ease passenger congestion at check-in areas.



Ascent airport architecture

Reports

You can print hardcopies of the bar chart display from the ARIS/CI check-in counter allocator. You can print reports showing check-in counter usage, which can be used for billing, as well as reports indicating which check-in counters are assigned to which flights. You can distribute printouts to assist with planning staffing needs.

The ARIS/CI check-in counter allocator stores information in the ARIS/SmartBase database, which runs on the Oracle® database. We can create reports for you, and you can create your own reports from a synchronized reporting database using Oracle-compatible report-generator tools, without interfering with the integrity or performance of the ARIS/SmartBase database.

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 or call our Sales and Marketing department at +1.617.395.4800.

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 SmartAirline Operations Center and SmartAirport Operations Center products, services, and solutions.

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 and SmartAirport Operations Center solutions. 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. The team also configures, installs, and tests hardware, software, and equipment for you when you choose to integrate the SmartAirline Operations Center or SmartAirport Operations Center solutions in your IT environment, and quickly sets up an environment in our hosting center for you when you choose to gain access to the solutions over the web.

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

Maintenance and support services. We offer Standard Support Services Monday through Friday during our normal office hours in Cambridge, MA, and Premium Support Services around the clock. Both provide comprehensive remote user support services via telephone, email, and Internet, as well as software maintenance, such as product updates, patches, and releases. We provide a web-enabled support portal that enables you to ask questions and receive responses, request service, report problems, and track issues.

Technology Platform

You can gain access to the SmartAirline Operations Center or SmartAirport Operations Center solutions in two ways: you can integrate the solution into your own IT environment, or you can gain access over the Internet to the solution running on Amazon Web Services (AWS) platform.

Ascent Technology Products	**Your own IT environment** Server: Microsoft® Windows® Server™ 2012 or 2016 operating system or Red Hat® Enterprise Linux 7; if virtualized, our solutions are certified to run on VMware® server virtualization products Database: Oracle 12C SE2 Desktop: Windows 7, 8 or 10 with 4GB of RAM Browser: Microsoft Internet Explorer 11, Microsoft Edge, latest Google Chrome or Mozilla Firefox Minimum internet access for remote support: 512 kbps			**Amazon Web Services (AWS) platform** Browser: Microsoft Internet Explorer 11, Microsoft Edge, latest Google Chrome or Mozilla Firefox; Internet connection (1 Mbps or better)
	Server	Client desktop	Web browser	
ARIS/AV® aerial-view display	✓		✓	✓
ARIS/AR® aircraft-routing system	✓	✓		
ARIS/SmartBase® database (including Resource Editors)	✓			
ARIS/BB® baggage-belt allocator	✓	✓		✓
ARIS/BIS™ billing information system	✓		✓	✓
ARIS/CI® check-in counter allocator		✓		✓*
ARIS/CX® crew-connection analyzer			✓	✓
ARIS/GateView® real-time display	✓	✓		✓
ARIS/GM® gate manager		✓*		✓*
Right Now View® operations dashboard	✓		✓	✓
ARIS/PX® passenger-connection analyzer	✓		✓	✓
ARIS/Reports™ data analyzer	✓		✓	✓
ARIS/SB® schedule builder	✓	✓	✓	✓
ARIS/SL™ schedule loader	✓		✓	
ARIS/SmartBus® communication middleware	✓			
ARIS/SP® stand planner		✓*		✓*
SmartAirline/SmartAirport Capacity Analyzer strategic planner	✓		✓*	✓*

Ascent WorkZone® workforce management system	✓	✓*	1200x768 minimum resolution for ARIS/WorkNet® bid and trade manager

*Minimum display resolution (pixels): 1600 x 1200