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## **ARIS/SP<sup>®</sup> stand planner**



# Plan gate, stand, and parking-position assignments for complete schedule periods

The ARIS/SP stand planner plans gate, stand, and remote parking-position allocations for all days in a seasonal flight schedule.

With the ARIS/SP stand planner, you can:

- Create seasonal aircraft parking-assignment plans in which flights are assigned to the same parking positions for the schedule period
- Create plans based on the same flight-schedule information stored in the ARIS/SmartBase<sup>®</sup> database used by other ARIS<sup>®</sup> air-transportation products
- Identify and resolve conflicts between needed and actual gate, stand, and parkingposition resources
- Provide plans that guide the ARIS/GM<sup>®</sup> gate manager in assigning parking positions prior to the day of operation
- Ensure that weekly and/or week-to-week parking-position assignments are consistent
- Specify the balance between consistent day-to-day parking assignments and parking assignments optimized for a specific day
- Create seasonal parking-position plans automatically

## Plan week and day-of-the-week parking position schedules

If your flight operations are much the same from day to day, the ARIS/SP stand planner can create a weekly plan that assigns consistent parking positions to flights on each day of the week and from one week to the next. If your flight operations vary from day to day, the ARIS/SP stand planner can create a plan for weekdays, for weekends, and for each day of the week so that one plan is used for all Mondays, another for Tuesdays, and so on. The ARIS/SP stand planner maintains consistent parking assignments insofar as possible.

In both cases, you can load the plan into the ARIS/GM gate manager to pre-allocate parking positions prior to the day of operation. If a parking assignment planned by the ARIS/SP stand planner is not appropriate, for example because of an aircraft-type change on the day of operation, the ARIS/GM gate manager automatically corrects the assignment.

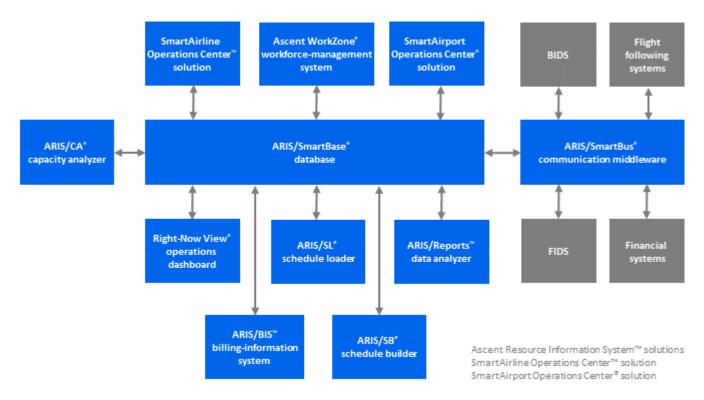
The planning capabilities of the ARIS/SP stand planner are not limited to a single airport. It can generate plans for any number of airports affected by a given flight schedule. Because it stores all plans in the ARIS/SmartBase database, the ARIS/SP stand planner can create a report that pinpoints when and where schedule conflicts exist and resources are exceeded.

## Analyze flight schedules in detail

As the ARIS/SP stand planner creates parking-assignment plans, it produces information you can use to analyze flight schedules. For example, the ARIS/SP stand planner identifies schedule conditions, such as flight legs that do not match turns, turns that do not match flight legs, and imbalances at airports in multi-airport systems, and automatically stores information about the conditions in the ARIS/SmartBase database.

# Use the same business knowledge that drives the ARIS/GM gate manager

The ARIS/SP stand planner makes planning decisions using the same business rules and flight-schedule information stored in the ARIS/SmartBase database that the ARIS/GM gate manager uses to make operations decisions. Using airport models stored in the database, the ARIS/SP stand planner creates parking-assignment plans that accurately reflect physical changes to the airport, such as construction that prevents particular aircraft types from parking at particular positions.



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2

#### 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.

## **Representative features**

**Parking assignments available at a glance.** The ARIS/SP stand planner provides an easyto-use graphical user interface that displays parking positions in a bar-chart format, similar to the ARIS/GM gate manager bar chart.

**Shared knowledge base.** The ARIS/SP stand planner makes long-term planning decisions using the same knowledge base used by the ARIS/GM gate manager to make short-term planning and day-of-operation assignments.

Automatic conflict identification. The ARIS/SP stand planner automatically identifies conflicts between flight-schedule requirements and available airport resources.

**Seasonal schedule period allocation.** The ARIS/SP stand planner creates parking assignments for all days or for a user-selected subset of days in the schedule period. It provides consistent parking plans from day to day, ensuring consistent week and week-to-week plans.

What-if analyses. You can create multiple plans for the airport, and each plan can use different business rules and physical layouts. This makes it easy to determine the effect of construction, renovations, preferences, and business-rule changes on the stand plan. It also makes it easy to understand how future changes, such as facility construction projects, affect flight operations.

**Automatic handling of varying turns.** Links between arrivals and departures often vary during a schedule. The ARIS/SP stand planner recognizes the changes and combines relevant information into a single assignment that covers flight variations.

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<sup>™</sup> data analyzer, a companion tool.

**Collaborative decision-making.** The ARIS/SP stand planner supports team decisionmaking, 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/SP stand planner through Ascent's From Touchdown to Takeoff<sup>®</sup> 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/SP stand planner, 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<sup>™</sup> solution and SmartAirport Operations Center<sup>™</sup> 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 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 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 <sup>*</sup> baggage-belt allocator	✓
ARIS/BIS <sup>™</sup> billing-information system	✓
ARIS/CA <sup>®</sup> capacity analyzer	✓
ARIS/CI* check-in counter allocator (with ARIS/IQ* queue manager)	✓
ARIS/FW <sup>®</sup> flight watcher	✓
ARIS/GateView <sup>*</sup> real-time display	✓
ARIS/GM <sup>*</sup> gate manager	✓
ARIS/Reports <sup>™</sup> data analyzer	✓
ARIS/SB <sup>*</sup> schedule builder (with ARIS/LegGen <sup>*</sup> flight-leg generator)	✓
ARIS/SL* schedule loader	✓
ARIS/SmartBase* database (with Resource Editor tools)	✓
ARIS/SmartBus* communication middleware	✓
ARIS/SP* stand planner	✓
Ascent WorkZone <sup>®</sup> workforce manager	✓
ARIS/WorkModel <sup>®</sup> workload generator	✓
ARIS/WorkNet <sup>®</sup> bid and trade manager	√*
ARIS/WorkOptimize <sup>®</sup> work-period generator	✓
ARIS/WorkPlan® work-schedule generator	✓
ARIS/WorkRelay® task and attendance monitor	✓
ARIS/WorkTime <sup>®</sup> workday manager	✓
Right-Now View* operations dashboard	✓
ARIS/CX* crew-connection analyzer	✓
ARIS/FR <sup>®</sup> 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/AN, ARIS/CA, ARIS/CA, ARIS/CA, ARIS/CA, ARIS/CA, ARIS/CA, ARIS/FA, ARIS/GA, ARIS/GA, ARIS/GA, ARIS/A, ARIS/A, ARIS/A, ARIS/SA, ARIS/SB, ARIS/SE, ARIS/SL, ARIS/CA, ARIS/CA,

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