ASCENT®
TECHNOLOGY, INC.

The ARIS/SP® stand planner

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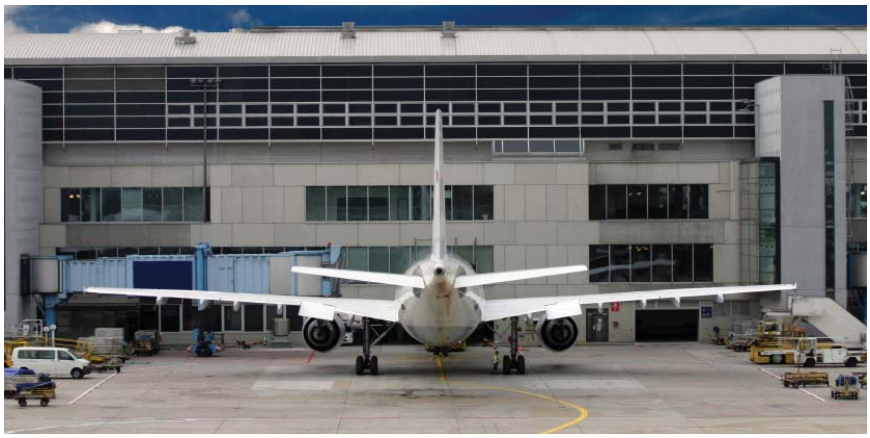
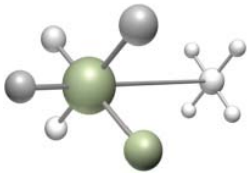




Plan gate, stand, and parking position assignments for complete schedule periods

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® database used by other ARIS® air-transportation products
- Identify and resolve conflicts between needed and actual gate, stand, and parking-position resources
- Provide plans that guide the ARIS/GM® 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 day-to-day parking assignment consistency and parking assignment optimization 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 quite a bit 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.

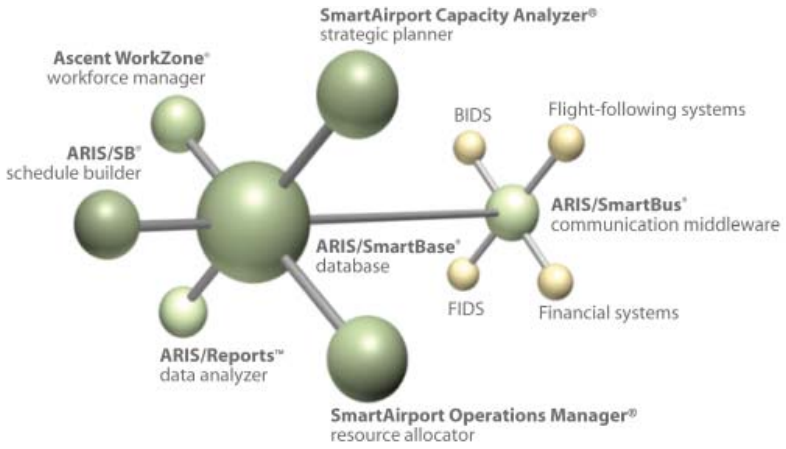
The planning capabilities of the ARIS/SP stand planner are not limited to a single airport. It can generate plans for any number of airports affected by a given flight schedule. Because it stores all plans in the ARIS/SmartBase database, the ARIS/SP stand planner can create a report that pinpoints when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

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 tool 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 then stores information about the conditions in the ARIS/SmartBase database automatically.

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 certain aircraft types from parking at certain positions.



Ascent airport architecture

Who we are

Since our founding 25 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 easy-to-use graphical user interface that displays parking positions on a Gantt chart, similar to the ARIS/GM gate manager Gantt 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 without changing database accounts or loading separate airport configuration files, making it easy to determine the effect of construction, renovations, preferences, and business rule changes on the stand plan.

Multiple scenario support. You can create plans derived from the same schedule that use different airport rules and physical layouts. This makes it easy to understand how future changes, such as facility construction, affects 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.

More information

To learn more about how the SmartAirline Operations Center or the SmartAirport Operations Center solutions can help you optimize your resources to greatest advantage, send email to sales@ascent.com or call our Sales and Marketing department at +1.617.395.4800.

Reports

You can print hardcopies of the ARIS/SP stand planner Gantt chart. You can also convert the output to PDF file format for distribution.

The ARIS/SP schedule planner 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.

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 solutions 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 solutions running in our IT environment in our hosting center.

Database server: A server that supports Oracle® Database Standard Edition

Compute and/or connectivity server: A server running Microsoft Windows Server® operating system or Linux® operating system; if virtualized, our solutions are certified to run on VMware® server virtualization products

Desktop: A PC running Microsoft Windows Vista®, Microsoft® Windows XP, or Microsoft® Windows 7 operating system; or some versions of the Linux operating system