## ASCENT. TECHNOLOGY, INC.

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

### **Right-Now View® operations dashboard**



# Forecast, plan, and manage critical resources with Ascent Technology's fully-integrated From Touchdown to Takeoff<sup>™</sup> cloud-hosted service for airline and airport operations

Ascent's From Touchdown to Takeoff cloud-hosted service delivers the power of the Ascent Resource Information System® solutions (ARIS®, for short) in a secure, highly-available, and readily-expandable cloud-hosted infrastructure. When you subscribe to our cloud-hosted service, you can access Ascent's comprehensive suite of ARIS solutions 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 the solution to accommodate additional users and to manage additional resources, facilities, and locations.

The Right-Now View operations dashboard is a customizable, highly graphical, webenabled tool that consolidates, organizes, and presents your organization's planning, scheduling, operations, and performance information in one or more displays, called content panes, in your screen. It enables you to view, analyze, and act on extensive information about your organization's past, current, and future operations at a glance. Because the Right-Now View operations dashboard receives continuously updated operations and performance information from the ARIS/SmartBase® database, information displayed in the dashboard is always current. When you enter or change resource, plan, schedule, and event information in the Right-Now View operations dashboard, the ARIS/SmartBase database automatically shares the updated information with the rest of the ARIS solution in near real time. Similarly, when a co-worker enters or changes information in the ARIS solution, the Right-Now View operations dashboard displays the updated information to you in near real time.

#### 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.

Many users view the Right-Now View operations dashboard as read-only, standard-format dashboards your organization creates and presents on large wall-mounted displays, desktop displays, tablets, and touch-screen mobile devices. Other users both view and manipulate information in Right-Now View operations dashboards, using content panes they select, size, and position to match their tasks, responsibilities, and preferences. Administrative users create, manage, and share custom dashboards with other users, choosing particular information to display in content panes and positioning the content panes in dashboards in ways that match your organization's communication needs and preferences. There are many options for content panes:

- Read-only gate charts displaying released and unreleased assignment information
- Fully functional, real-time gate charts, displaying released and unreleased assignment information, that support information entry and manipulation
- Planned gate charts, such as those planned months in advance and seasonal plans generated by the ARIS/CA™ capacity analyzer
- Graphs of gate, stand, and remote parking-position use over time—scheduled, planned, current, and past
- Gate-release control information
- Passenger-connection and crew-connection information
- · Arrival and departure flight-readiness status
- Aircraft-towing status
- Gate-use overviews
- Aerial views of airport operations
- Global lines of flight through multiple airports when system-wide airline flight data are available
- Embedded external web pages, such as real-time weather data available over the World Wide Web
- System status, including statistics, memory-usage, and message-traffic information

An operations manager, for example, might create a dashboard with content panes that display up-to-the-minute information about ground activities by time of day, departure delays, arrival delays, weather conditions, estimated times of arrival and departure, and aircraft-parking assignments by stand and time of day. A ramp manager might create a dashboard with content panes that display aerial views of aircraft-parking assignments and information about possible delays in completing ground activities associated with departures. A passenger-services manager might create a dashboard that displays aerial views of gate locations and flight times to passengers on FIDS-like screens throughout a concourse.

There are endless ways to customize the Right-Now View operations dashboard to fit users' needs, ranging from choosing and laying out content panes to choosing colors, font sizes, and scaling levels of information displayed on flight bars in gate charts. The system stores customized settings in the central server and makes them available to users across sessions on multiple computers. With unlimited browser-window support, users can display information across several monitors. Users can also display their customized gate chart with each airport terminal on a separate monitor.

#### **Representative features**

Extensive variety of up-to-date operations and performance information available at a glance. The ARIS/SmartBase database, which stores comprehensive information about resources, plans, schedules, and operations managed by Ascent's ARIS solutions and ensures that users have access to the same up-to-the-minute information at the same time, is the primary source of information displayed in content panes. You can enrich this information with material from embedded external web pages and, in combination with the ARIS/SmartBus® communication middleware, from external data sources, systems, and applications, creating seemingly endless possibilities for dashboard content and layout. Possible options include:

- The ARIS/AV™ aerial-view display content pane provides up-to-the minute aircraftparking status at gates, stands, and remote parking positions.
- The ARIS/CX™ crew-connection analyzer and ARIS/PX™ passenger-connection analyzer content pane enables you to determine how flight delays and cancellations affect connecting crews and passengers. Crew-connection and passenger-connection information overlays help you spot possible problems in advance so you can determine the best ways to recover the schedule.
- The ARIS/FR™ flight-readiness display content pane provides information about tasks and activities associated with flight arrivals and departures, such as fueling, catering, baggage loading, baggage unloading, and boarding status.
- The ARIS/TE™ tug-equipment assigner content pane provides an automated workflow for aircraft-tow management, displaying tows that must be completed, available tugs, and tow progress.
- The Gate Chart Display™ tool content pane displays gates, stands, and parking
  positions and the flights assigned to them. The gate chart provides detailed
  information for each flight that can be customized to meet users' needs and
  preferences. Authorized users can change parking assignments, create and cancel
  tows, and change flight times directly in the gate chart.
- The Stand Assignment Optimizer™ tool, which runs in the background, searches
  continuously for opportunities to resolve problems that arise due to the flight
  delays, swaps, and cancellations. The tool understands that changes are limited to
  future flights, leaving immediate arrival and departure flights unchanged.

Multiple content panes can be placed in a dashboard and configured individually. You can choose from dozens of content panes to create the dashboard layout you prefer, with full control over content-pane position and size. Some content panes contain graphical information, others contain textual or numerical information; some content panes are read-only, and others enable authorized users to modify information. The system automatically adjusts the layout to the screen size or browser tab within which it operates.

Visual marking of related information supports rapid situation awareness and better decision-making. The Right-Now View operations dashboard highlights information displayed in more than one content pane, so you can easily identify and analyze related information. When you place the pointer over particular information in one content pane, such as over a delayed flight in a Departure Delays content pane, the system marks the same information in other content panes, such as the same delayed flight in an Arrival Delays content pane and in a Ground Activity content pane. When you place the pointer over an item in a graph, plot, or bar chart, the system displays information about the item in a message block within the graph, plot, or bar chart.

View and analyze information about past, current, and future operations. Situational-awareness content panes display key operational performance matrices that describe how well your organization is doing at the moment and in the past, as compared with daily and weekly statistical past-performance information.

Create customized graphical information displays easily, without programming. Intuitive menus and tools enable you to choose the information you want to display, to position the information in a content pane in a grid in the dashboard, to drag the content pane to a new position, to specify the size of the content pane, and to add and remove content panes from the dashboard.

Content panes update dynamically, supporting real-time interaction between multiple users. When you manipulate information in a content pane, your changes appear in other users' screens automatically within seconds with no need to refresh screens manually.

Content panes synchronize dynamically. Content panes transmit user-action information to each other, even when the content panes are running in different browser windows. For example, when you place the pointer over an item in one content pane, the system highlights the item in your other content panes even when the item is represented differently in the other content panes and when the content panes are displayed in other browser tabs.

A robust role and permission structure enables organizations to restrict who can make, modify, and share dashboards. Additional user-based permissions can restrict which data can be displayed and which actions can be taken within content panes.

Stores all information securely in the ARIS/SmartBase database, with as much redundancy as your organization requires. Because the ARIS/SmartBase database coordinates the actions of all other Ascent Resource Information System products in your solution, when you enter information in the Right-Now View operations dashboard, the information is available to all other ARIS products within seconds.

#### 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™ solution and SmartAirport Operations Center™ 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 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.

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.

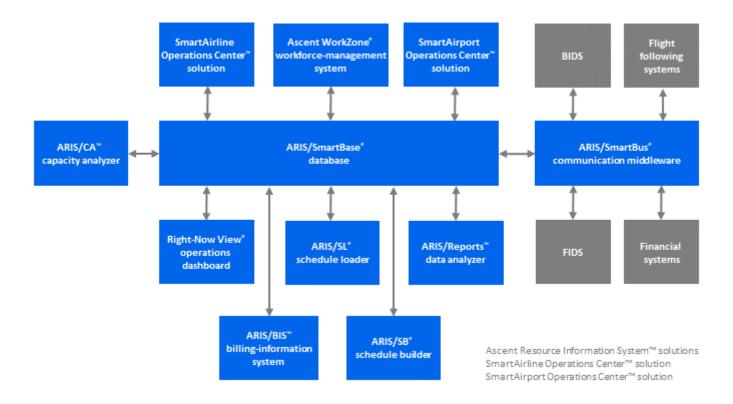
**Implementation, integration, and installation services.** Our implementation team provides system integration and testing services; develops product extensions,

enhancements, and connectivity software for importing data to and exporting data from

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.

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.



#### 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 <sup>™</sup> aerial-view display	✓
ARIS/BB* baggage-belt allocator	<b>✓</b>
ARIS/BIS™ billing-information system	<b>✓</b>
ARIS/CA™ capacity analyzer	<b>√</b>
ARIS/CI* check-in counter allocator (with ARIS/IQ* queue manager)	<b>√</b>
ARIS/GateView* real-time display	✓
ARIS/GM* gate manager	<b>√</b>
ARIS/Reports <sup>™</sup> data analyzer	<b>√</b>
ARIS/SB* schedule builder	<b>√</b>
ARIS/SL* schedule loader	<b>√</b>
ARIS/SmartBase® database (with Resource Editor tools)	<b>√</b>
ARIS/SmartBus* communication middleware	<b>√</b>
ARIS/SP* stand planner	<b>√</b>
Ascent WorkZone® workforce manager	<b>√</b>
ARIS/WorkModel™ workload generator	<b>√</b>
ARIS/WorkNet™ bid and trade manager	<b>√</b> *
ARIS/WorkOptimize™ work-period generator	<b>√</b>
ARIS/WorkPlan™ work-schedule generator	<b>√</b>
ARIS/WorkRelay™ task and attendance monitor	<b>√</b>
ARIS/WorkTime® workday manager	<b>√</b>
Right-Now View® operations dashboard	<b>√</b>
ARIS/CX <sup>™</sup> crew-connection analyzer	<b>√</b>
ARIS/FR™ flight-readiness display	<b>√</b>
ARIS/PX <sup>™</sup> passenger-connection analyzer	<b>√</b>
ARIS/TE™ tug-equipment assigner	<b>√</b>
Gate Chart Display™ tool	✓
Stand Assignment Optimizer™ tool	<b>√</b>

<sup>\*</sup> Minimum requirements: 512 Kbps Internet connection speed and SXGA resolution

ARIS, ARIS/AR, ARIS/AV, ARIS/BA, ARIS/CI, ARIS/COM, ARIS/DBM, ARIS/DBM, ARIS/DBM, ARIS/FR, ARIS/FW, ARIS/GM, ARIS/GM, ARIS/LQ, ARIS/FP, ARIS/FP, ARIS/FP, ARIS/SA, ARIS/SB, ARIS/SE, AR

Active Schedules, Advanced Pay Rule System, ARIS/AR Display Board, ARIS/AR Turn Generator, ARIS/BB Audit, ARIS/BS, ARIS/BX, ARIS/DS, ARIS/Forms, ARIS/Forms, ARIS/SCR, ARIS/SCR,

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 02/2021