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The best workforce-optimization and management solution for mission-critical and labor-intensive environments

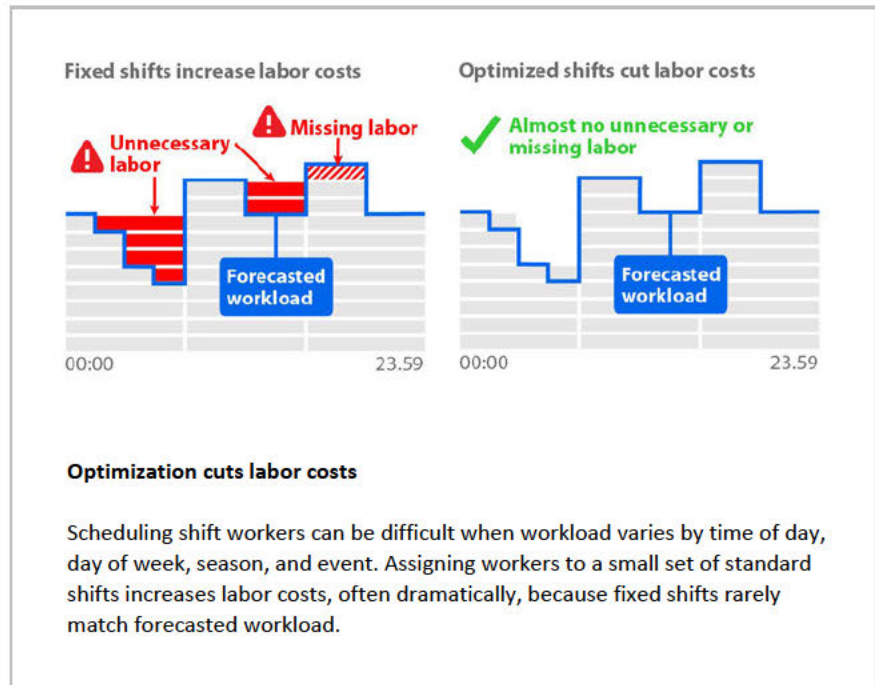
The Ascent WorkZone workforce manager forecasts your workload, creates the best plans to meet your forecasted workload, turns plans into schedules, assigns workers to schedules, adjusts schedules and assignments as workload changes, and assigns tasks to workers in real time in accordance with your organization's pay rules.

The Ascent WorkZone workforce manager enables you to increase workplace efficiency, lower your labor costs, and enhance your operating margins in many ways:

- Decreases your costs by ensuring that the size, timing, and composition of your workforce matches the work to be done
- Decreases your costs by reducing the time planners, managers, administrators, and supervisors spend creating plans, managing schedules, and handling many routine administrative tasks
- Adjusts and readjusts work schedules dynamically in response to actual conditions, by automatically identifying worker shortfalls, worker overages, and uncovered tasks as they emerge and suggesting worker reassignments, early outs, and minimal-cost extra hours
- Provides worker-centric, web-enabled, self-service tools that enable workers to choose work and vacation schedules based on their preferences, to view work schedules and assignments, to trade work periods with co-workers, and to make work, leave, and vacation requests
- Collects and communicates task, task-completion, and time and attendance information
- Provides powerful analyses, comprehensive reports, and past-performance information that enable you to improve future performance

Ascent Technology's From Touchdown to Takeoff® cloud-hosted service delivers the power of the Ascent WorkZone workforce manager in a secure, scalable, high-availability cloud-hosted infrastructure. You use a standard browser to access the Ascent WorkZone workforce manager directly from your network without having to purchase, install, maintain, and support on-premise hardware and software. We can rapidly adjust available computing power to meet your organization's changing needs and expand the solution to accommodate additional users and to manage additional resources, facilities, and locations.

Mission-critical and labor-intensive organizations of all sizes rely on the Ascent WorkZone workforce manager to optimize, plan, schedule, and deploy human and physical resources around the clock, day in and day out.



It's really hard to create the best work schedules— schedules that align costs, work rules, customer satisfaction, and worker satisfaction—without using the right tools

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.

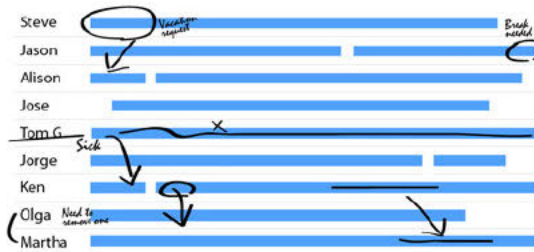
All labor-intensive organizations face the challenge of knowing which workers to deploy when, where, and for how long. Always staffing at peak levels wastes money and leaves workers idle during slower periods, while always staffing at normal levels leads to worker shortages, poor service during busy periods, and unhappy customers. Different departments have peak, normal, and slow periods at different times. Other issues to consider include seniority; vacation and leave schedules; work preferences; mandatory work rotations and rest periods; balancing the ratio of full-time and part-time workers; and workload variations by day, week, season, and year; and planned and unplanned schedule disruptions.

Because solving workforce-management problems is hard to do manually, organizations often look for a software solution that can, among other things:

- Determine how many workers are needed on each day and at each time of day
- Identify the best start and end times for each work period
- Create the best work schedules to handle anticipated workload
- Produce work schedules that can be managed by workers and by administrators
- Create real-time work assignments based on current conditions
- Find the right balance between low costs and high customer and worker satisfaction

But most workforce-management systems deliver incomplete results, which means you pretty much have to redo the work manually to identify gaps the system missed and then fix them. That same duplication of effort applies every time—whether you are planning work periods, creating work schedules, making real-time task assignments, or doing long-range scenario planning. In fact, what organizations quickly discover when they use a less-than-complete solution is that there is no such thing as a fixable automated schedule. Either the system produces a schedule you can trust right from the start, or the system produces a schedule that is worthless because of all the extra manual work needed to make the schedule useful. There is no middle ground. Getting a trusted schedule on the back end means capturing absolutely everything on the front end that goes into the scheduling process. Even the slightest omission of some key elements can ripple through the entire schedule. Take something as seemingly trivial as, “Joe can’t work after 12:00pm on Fridays.” Not capturing that rule correctly will, in all likelihood, randomly and occasionally schedule Joe to work on a Friday afternoon. Not only will that assignment not work; fixing the problem means moving other workers around to cover for Joe, which, in turn, affects those workers’ schedules (not to mention the tasks that need to be covered), all of which must be managed in the context of mandatory work rotations, preferences, seniority, and so forth. And, it also means finding a different spot in the schedule for Joe to work his hours—causing yet more ripples, again in the context of all the work rules that apply. Not only must you make all these adjustments manually, which is a nightmare by itself, but you also have to spot the mistake in the first place. That means that you must remember all those rules in your head, and there may be hundreds, or thousands, or tens of thousands, of rules. Not remembering can lead to a vicious cycle of more time-consuming and costly errors on top of other errors leading to still more errors.

Manual tweaking increases administration costs



Optimization cuts administration costs

Schedules that must be modified manually are worthless.

The Ascent WorkZone workforce manager uses powerful algorithms to compute millions of possible combinations of shifts. It determines the best shift start times, end times, and durations to match your forecasted workload at the lowest possible cost each and every day. The Ascent WorkZone workforce manager lowers your labor costs and ensures the right workers are in the right places at the right times to handle your workload.

Worker's work preferences

Worker A	3	1	2
Worker B	2	1	3
Worker C	3	2	1
	00:00		23:59

Work assignments for workers

Day 1	B	A	C
Day 2	B	C	A
Day 3	C	B	A
	00:00		23:59

Optimization increases worker satisfaction

The Ascent WorkZone workforce manager provides worker-centric, web-based, self-service tools that enable workers to choose work and vacation schedules they prefer; to view work schedules and assignments; to trade work periods with co-workers; and to make work, leave, and vacation requests. Enabling your workers to gain more control over their work lives increases their satisfaction and productivity.

Why waste your time with an incomplete system when you can manage your mission-critical workforce with the right tool—the Ascent WorkZone workforce manager?

More information

To learn more about how Ascent Technology can help you optimize your workforce 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 +1.617.395.4820.

The Ascent WorkZone workforce manager contains six powerful products that ensure the right workers are in the right places at the right times to handle your workload efficiently and cost-effectively.

- **The ARIS/WorkModel® workload generator** forecasts your workload by combining projections of expected demand, based on your normal operations and special events, with embedded knowledge about how your organization prefers to operate. The product determines the optimal number of workers you need and when you need them to cover your workload most efficiently and at the lowest cost.
- **The ARIS/WorkOptimize® work-period generator** determines how many work periods are required for each workday, how many workers should be assigned to each work period, and when each work period should start and end.
- **The ARIS/WorkPlan® work-schedule generator** produces work lines that make the best use of available full-time and part-time workers.
- **The ARIS/WorkNet® bid and trade manager** provides a worker self-service tool that enables workers to manage their work schedules, and express preferences for future work days, days off, and work period start times and end times. It enables workers to preview available work schedules and vacations, and then request the work schedules and vacations that best suit their needs, using a convenient web-browser interface. The product enables administrators and managers to view and modify worker schedules, broadcast messages to workers, view worker preferences and qualifications, identify workers available to work additional hours or overtime, and approve or deny work-trade requests and leave requests.
- **The ARIS/WorkTime® workday manager** assigns work, breaks, meals, and locations to workers dynamically in real time, taking into account how many workers are required, where each worker should be stationed, and how much time is needed to travel between assignments.
- **The ARIS/WorkRelay® task and attendance monitor** provides task-assignment information to workers, such as where they should be, what they should do, and when they should take breaks and meals.

The six products are modular, scalable, and web-enabled, so you can install the Ascent WorkZone workforce manager in steps, mixing and matching modules and components that best fit your organization's needs, budget, timing, and growth plans.

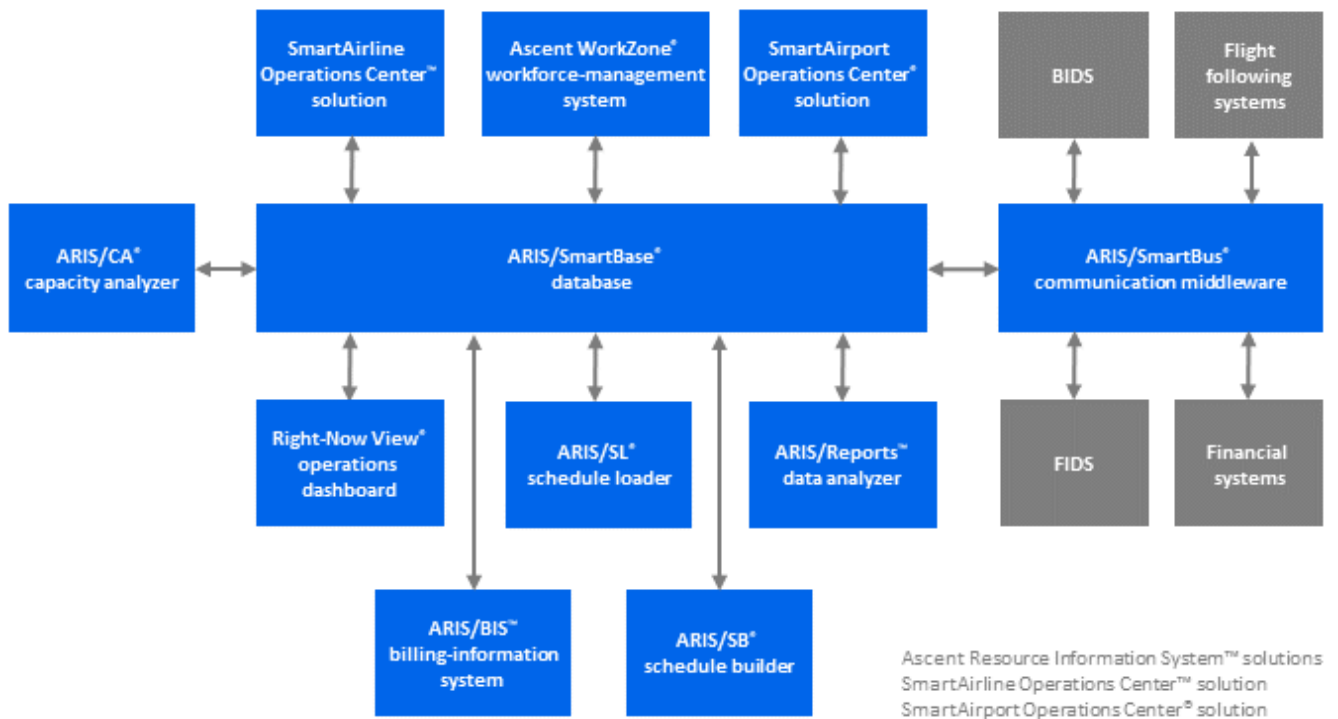
The Ascent WorkZone workforce manager contains an automated work-rule modeler with an easy-to-use interface that enables you to express your organization's work rules in in English-language-like entries that senior management, union management, and schedulers understand. It also contains an automatic translator that converts the entries into a program that interprets them and then executes them efficiently for fast computation and optimum workplace operation. The program code is invisible to the user, and so, too, are the optimization and allocation algorithms the system uses to find the lowest cost and highest satisfaction solution within the prevailing rules and preferences.

The Ascent WorkZone workforce manager also contains an automated scenario modeler that facilitates rapid and error-free schedule creation under the current rules and also enables you to build multiple scenarios that reflect variations of rules through time, enabling you to see how different rule sets affect each schedule. Long work-schedule bid lines, for example, that cover months or an entire year may span different labor contracts. When the system generates those schedules, it must consider those changes, as it works to generate a single schedule. Scenarios also let you evaluate different hypothetical work rule sets so you can decide which ones make the most sense for your bottom line, your customers, and your workers. Building these scenarios would be impractical without a complete end-to-end solution like the Ascent WorkZone workforce manager—one that generates complete finished schedules directly from user-understandable input without tweaking schedules manually and without custom coding.

That’s the key measure of any automated workforce-management system, whether for testing possible future scenarios or for generating the optimum schedule with which to allocate workers now. The optimum schedule perfectly balances costs, service levels, customer satisfaction, and worker satisfaction, given all work rules and worker preferences, regardless of how many workers, worker types, or work rules there are. The sooner you get that schedule, the sooner you can focus on what really matters—the work.

Step up to the Ascent WorkZone workforce manager and optimize your workforce to greatest advantage

The Ascent WorkZone workforce manager is the best workforce optimization and management solution for mission-critical and labor-intensive environments. It is easy to use, fast, flexible, and cost-efficient. When you see it in action, you’ll wonder how you ever managed without it.



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 [®] baggage-belt allocator	✓
ARIS/BIS [™] billing-information system	✓
ARIS/CA [®] capacity analyzer	✓
ARIS/CI [®] check-in counter allocator (with ARIS/IQ [®] queue manager)	✓
ARIS/FW [®] flight watcher	✓
ARIS/GateView [®] real-time display	✓
ARIS/GM [®] gate manager	✓
ARIS/Reports [™] data analyzer	✓
ARIS/SB [®] schedule builder	✓
ARIS/SL [®] schedule loader	✓
ARIS/SmartBase [®] database (with Resource Editor tools)	✓
ARIS/SmartBus [®] communication middleware	✓
ARIS/SP [®] stand planner	✓
Ascent WorkZone [®] workforce manager	✓
ARIS/WorkModel [®] workload generator	✓
ARIS/WorkNet [®] bid and trade manager	✓ *
ARIS/WorkOptimize [®] work-period generator	✓
ARIS/WorkPlan [®] work-schedule generator	✓
ARIS/WorkRelay [®] task and attendance monitor	✓
ARIS/WorkTime [®] workday manager	✓
Right-Now View [®] operations dashboard	✓
ARIS/CX [®] crew-connection analyzer	✓
ARIS/FR [®] 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/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 (stylized) SmartAirline Information Manager (stylized) SmartAirline Operations Manager (stylized) SmartAirline WorkZone SmartAirline WorkZone (stylized) SmartAirport Smartairport.com SmartAirport Capacity Analyzer SmartAirport Capacity Analyzer (stylized) SmartAirport Information Manager SmartAirport Information Manager (stylized) SmartAirport Operations SmartAirport Operations Center SmartAirport Operations Manager SmartAirport Operations Manager (stylized) SmartAirport WorkZone and SmartAirport WorkZone (stylized) are registered trademarks of Ascent Technology Inc. in the United States.

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