

Pragma[®]CAD

Scheduling Optimization

Workforces in the field need intelligent planning tools to support the response and flexibility that is expected of leading service delivery organizations. CGI's PragmaCAD Scheduling Optimization accurately analyzes business volumes and resource requirements critical in meeting the growing demands of a virtual connected workforce.

MOBILE WORKFORCE SCHEDULING

Leveraging PragmaCAD's core dispatching capabilities, the Scheduling Optimization portfolio integrates tactical resource planning, job scheduling, workflow management, and mobile functionality for intelligent scheduling recommendations based on key organizational metrics.

All resources involved in the work order process connect within a transparent platform, creating a single consolidated schedule for successful coordination and execution of work across the organization. The central scheduling and routing algorithms evaluate multiple scenarios in real-time to find the appropriate resource with the right skill set, the right equipment, at the right time, and for the right location. Priority-based work order assignment minimizes job reassignment and ensures priority work is not left incomplete.

As climate, system conditions and business requirements change, scheduling is inherently impacted. The advanced optimization algorithms converge on the ultimate schedule to provide real-time views into work assignments, including expected duration and travel times to realign resources as required, and deliver ongoing workload balance due to those varying conditions.

APPOINTMENT MANAGEMENT

PragmaCAD's Appointment Management is a flexible planning tool that acts as a custodian of overall production capacity. The result is a dramatic improvement in operational efficiencies and a substantial reduction in the customer's appointment window.

Taking into consideration the variable productivity of individual field resources, matching demand to availability with a relatively narrow appointment window can produce accurate capacity predictions. Service representatives have direct access to a real-time schedule so they can efficiently book and adjust appointments as needed. The increased precision of the assignment of resources can help respond faster to customer needs and maximize the organization's efficiency and productivity.

With fully integrated workload and routing management capabilities, capacity is allocated and optimized in real-time based on daily activities and conditions in the field while maximizing the workforce routing efficiency at the street level.



KEY FEATURES

- Highly scalable for small or large mobile workforces
- Optimization and redistribution of workload based on intelligent business rules, best practices and street-level routing
- Continuous adjustments of service schedules in real-time
- Master scheduling for varied business operations within the same organization
- Best route optimization with turn-by-turn street-level directions
- User-defined workflow parameters on an organizational level
- Over-capacity and under-capacity monitoring

With increasing customer pressure for improved communication and technology, PragmaCAD's Scheduling Optimization portfolio intelligently automates the planning, assignment, and delivery of work schedules to ensure the right resource does the right job at the right time.

WORK OPTIMIZATION

PragmaCAD's Work Optimization easily takes the guesswork out of the planning process. Using various algorithms integrated with real-time data, schedules are continually optimized for the best solution at any given time from both an operational and customer perspective.

Respecting all levels of scheduling criteria—from simple to complex tasks, from individual resources to multi-skilled, or from multi-crew assignments to short- and long-term cycles, these factors are combined with current workloads and then balanced to deploy field resources in the most efficient manner for optimized service delivery. Productivity is increased without compromising the customer service experience.

With the ability to re-optimize the levelling of workload, the organization can sustainably improve both the efficient use of its field resources and the services that it provides to its customers. Continuous reshuffling of planned and unplanned work allows for accurate visibility of workload and capacity across the organization, while still honouring the commitments made to customers and exceeding expectations with improved on-time response.

ROUTE OPTIMIZATION

Demand from customers for improved service performance is forcing organizations to leverage location intelligence to effectively schedule field resources. PragmaCAD's Route Optimization algorithm is designed to support associated resource assignments, ordered sequences and schedules with accurate street-level driving directions to create well-balanced routes for the entire field workforce.

Organizations can benefit from optimized, cost effective routing while maximizing the number of service locations, minimizing the number of resources and total working time, while at the same time, meeting business constraints and customer commitments. Overall field mileage would be reduced, and increased productivity and efficiency would result in consistent, on-time service.

HOW SCHEDULING OPTIMIZATION CAN WORK FOR YOUR BUSINESS

With advanced scheduling and workforce optimization, PragmaCAD's Scheduling Optimization portfolio ensures you are assigning the right resource to the right job at the right time, while achieving extraordinary levels of efficiency. Centralized optimization algorithms redefine the scheduling landscape and offer automated flexibility to increase the productivity and efficiency of your mobile workforce and service operations in real-time.

KEY BENEFITS

- Centralize scheduling and dispatching operations
- Reduced under and over staffing for increased productivity
- Greater customer satisfaction through improved service levels
- Improved overall reliability and efficiency of the organization
- Match quality and productivity data with customer service needs
- Flexibility to replicate, improve, and automate complex scheduling processes
- Accurate enterprise-wide visibility of workload and availability

ABOUT CGI

Founded in 1976, CGI is a global IT and business process services provider delivering a portfolio of industry-centric software solutions coupled with high-quality business consulting, systems integration and outsourcing services. With 69,000 professionals in 40 countries, CGI has an industry-leading track record of on-time, on-budget projects.

We partner with utilities across the globe to provide the knowledge and expertise to enable automation of the industry's best practices for enterprise asset and resource optimization.

For more information about CGI, visit www.cgi.com/utilities or email us at info.util-sol@cgi.com.