

Informer Systems

1900 S. Norfolk Street

Suite 350

San Mateo, CA 94403

800-470-6102

www.informersystems.com



By Informer Systems™

Executive Summary

Schedule Express addresses complex scheduling challenges and needs via a hosted solution which will automate scheduling procedures and will optimize highly trained workforce resources, process enhancements and technological enablement solutions.

The logistics involved with staffing and scheduling human resources, and physical assets to perform vital mission-critical services in an emergency, is the primary goal of Schedule Express. The scheduling of these workforces and resources pose a significant challenge to management. Specific scheduling issues include, but are not limited to:

- All planning and scheduling occurring via MS Excel, paper tools, or non-mission-critical centric scheduling software. These tools are prone to errors, and as such have multiple approvals and reviews that are tedious, inefficient, and can be problematic by letting errors slip through.
- Multiple shift patterns.
- Scheduling for purposes of maintaining skills of a highly trained workforce.
- The schedule planning process (annual, semi-annual, quarterly, monthly, weekly, & daily) can be varied and regimented at the same time. However there are significant exception cases, including multiple shifts, shift patterns, unplanned events, absences, time-off requests, annual leave, shift bidding, workers compensation, and more. These must be managed through work trading, overtime, schedule shuffling, etc. Each of these “shuffles” requires review and approval by appropriate administration.
- Large scale events that cross jurisdictional boundaries and that require the scheduling of specialized teams to be deployed or overtime events where additional resources are required, become a challenge at best for management. Additionally, the ability to generate reports are labor intensive, inconsistent, and do not provide a consolidation of data related to events and incidences.
- Multiple labor and process rules that are dictated by federal (FLSA), state, and local governments. Labor contract regulations, fatigue management and RP 755 guidelines. These rules, regulations, and guidelines are maintained in a variety of ways, which injects significant risk if a key stakeholder is taken ill, leaves their position, has fatigue, or even goes on vacation.
- Modification of schedules “on the fly” or the development of pre-planned schedules for specific events are laborious and inefficient.
- Notifications of personnel up and down lines of schedules to ensure fast and complete communications are inefficient and lacking.
- Maintaining a complete audit trail of all scheduling activities, related notes and comments.

Schedule Express Utilizes a SaaS Model

Schedule Express utilizes what is commonly known as Software as a Service or SaaS. SaaS is a hosted service that eliminates the need to install or maintain hardware or software at a customer's premise or location. It is a model of software deployment whereby a provider licenses an application to customers for use as a service on demand. It is a low-cost way for agencies to obtain rights to use software as needed versus licensing all client and/or server machines with applications. On-demand licensing enables the benefits of commercially licensed use without the associated complexity and initial high cost of infrastructure build-out and equipping every device with the application software.

Key Characteristics of SaaS include:

- Network-based access to, and management of, commercially available software
- Activities managed from central locations rather than at each customer's site, enabling customers to access applications remotely via the web
- Centralized feature updating, which obviates the need for end-users to download patches and upgrades
- More feature requests from users since there is frequently no marginal cost for requesting new features
- Faster releases of new features since the entire community of users benefits from new functionality

Key Benefits of SaaS include:

- Saves Money
- Saves Time
- Focus Budgets on Competitive Advantage rather than Infrastructure
- Gain Immediate Access to Latest Innovations
- Increased Accessibility
- Pay as you go, predictable costs
- Flexibility and Scalability

Informer Systems hosts Schedule Express on its own web servers, thus virtually eliminating the need for any software maintenance, updates, or upgrades on customer's client or server machines. As a hosted solution the only requirement is a browser and access to the internet.

Security

Schedule Express uses 256 bit SSL data encryption beginning from the login screen and throughout the user's interaction with the application. The login is user name and password protected. After three incorrect password attempts the account becomes locked until the password is reset. All pages in Schedule Express are security checked before allowing access to the database. This means someone cannot just enter the URL address in a browser and gain access to the system. The database sits behind a firewall. The firewall will only accept http connections. Given that our database does not accept http connections (only our web servers do), it is impossible to make a direct connection to our database server

from the outside world. In fact, only our http servers are connected to the internet through a load balancer and firewall, both of which filter the input requests. Schedule Express uses JBoss running on Redhat Linux for our application servers. This combination has an excellent record for stability and security.

Not once, since its launch in 2003, has Schedule Express experienced any unscheduled down time due to its multiple redundant hosting facilities. Additionally, given the tight security of the application with exception trapping there is virtually no way an outside user can gain unauthorized access to our servers and hack the system.

Value Proposition

Informer Systems has been in the public safety and mission-critical management information service business for 34 years. We believe the Schedule Express SaaS model is the benchmark solution for agencies and organizations and **will provide a substantial and measurable return on investment**. As such Informer Systems proposes the implementation and deployment of Schedule Express which will automate the scheduling processes and incorporate current work rules and policies into an efficient system. Agencies considering Schedule Express should expect the following benefits:

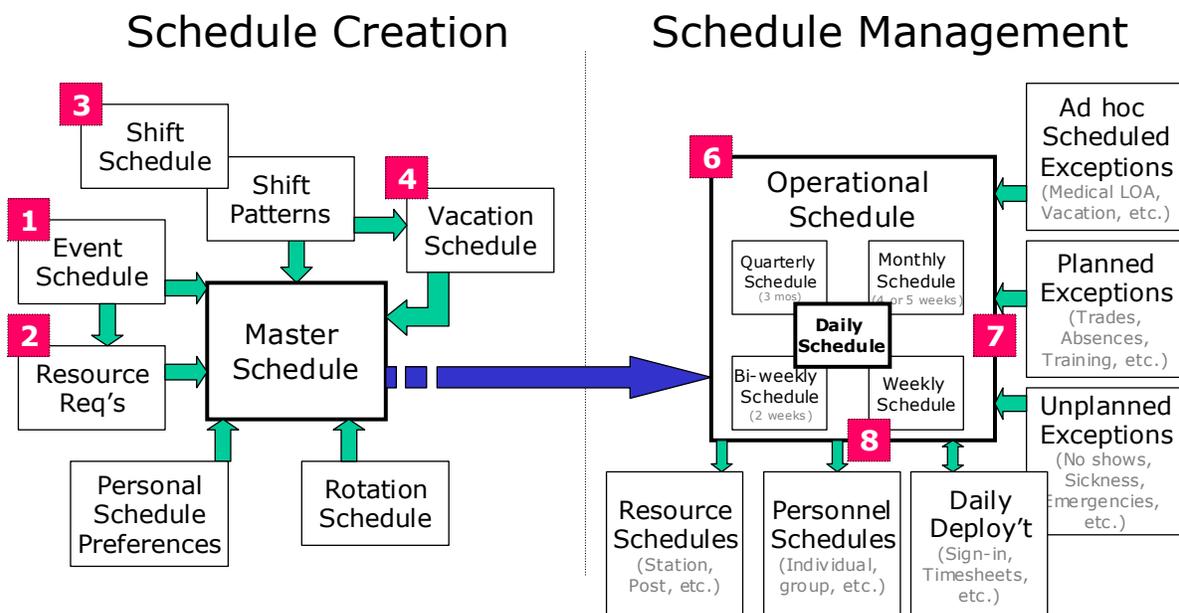
- Flexible scheduling that will allow a master workforce scheduling management solution to be maintained with higher quality and less time spent than the current manual error-prone schedule creation process.
- Administrative scheduling time currently expended by supervisory and management personnel can be allocated to more critical needs such as handling and exception management. This will allow supervisors to spend more time supervising than scheduling.
- Because this is a highly secure internet-based SaaS model that does not require hardware or software to be installed or maintained, the department can focus on their core mission.
- Regulatory compliance such as RP 755 guidelines has always been a difficult issue to deal with for emergency response departments and mission-critical organizations due to the complex regulation, high amount of training required for each employee, fatigue management, rapid employee turnover, and numerous processing exceptions that occur on a daily basis. Since Schedule Express has codified these multifaceted regulatory rules into the service, the level of compliance by the agencies, departments, and organizations will be much improved.
- Event based scheduling of human resources and physical assets that can be pre-built and brought online within minutes.
- The department will have access to a verifiable and accurate audit trail that can be analyzed and maintained for years to come, promoting both workforce improvements and regulatory compliance.

The following represent the scheduling goals of various agencies and organizations:

- Automate the absences, trades, and overtime request processes.
- Fatigue management through the RP 755 guidelines.
- Ability to create cohesive interconnected schedules for all shift patterns in the agency.

- Maintain a consistent “look and feel” throughout schedules to retain familiarity across all levels of access thus reducing training time.
- Increase speed and efficiency when producing daily, weekly, monthly, quarterly, semi-annual, annual and event driven work schedules.
- Reduce errors inherent in the current and varied methods of the manual/paper system.
- Message notifications up and down the schedule lines to ensure prompt response and reply.
- Move the majority of tasks associated with scheduling away from building/checking, to exception handling.
- Capture and retain various request forms electronically and provide the ability to associate requests and variances with the schedule.
- Ensure a secure and reliable system that is available 24/7/365.
- Satisfy staffing requirements by hour, shift, and event.
- Manage overtime.
- Minimize impact with information technology (IT) departments.
- System flexibility that will enable easy scalability and modification in the future.

From a process standpoint, the flow and elements involved in the scheduling effort can be depicted as follows:



In summary, current scheduling systems require that schedule creation be micromanaged across every level, AND from all departments from operator through management.

Schedule Express will include the ability to:

- Create, edit and view multiple schedules, multiple shift patterns, group schedules, pre-planned schedules, resource and location schedules, personnel preferences, and a master requirements schedule that captures minimum and maximum staffing requirements by role and job title.
- Easily build operational schedules that can be deployed to administrators, supervisors, operators, and other scheduled personnel.
- Track and maintain the daily schedule for an accurate log of activities and changes to the schedule.
- Effect trades, absences, vacations, overtime, training, and special assignments using existing rules and workflow.
- Manage fatigue through automation of RP 755 guidelines via rules, skill sets, and validations.
- Select overtime and vacations based on existing rules and workflow, taking into account seniority, and/or "rotation schedules".
- Create standard and exception reports for time management which can be used to interface into departments such as payroll and HR, and time keeper functions.
- Produce standard and exception reporting.

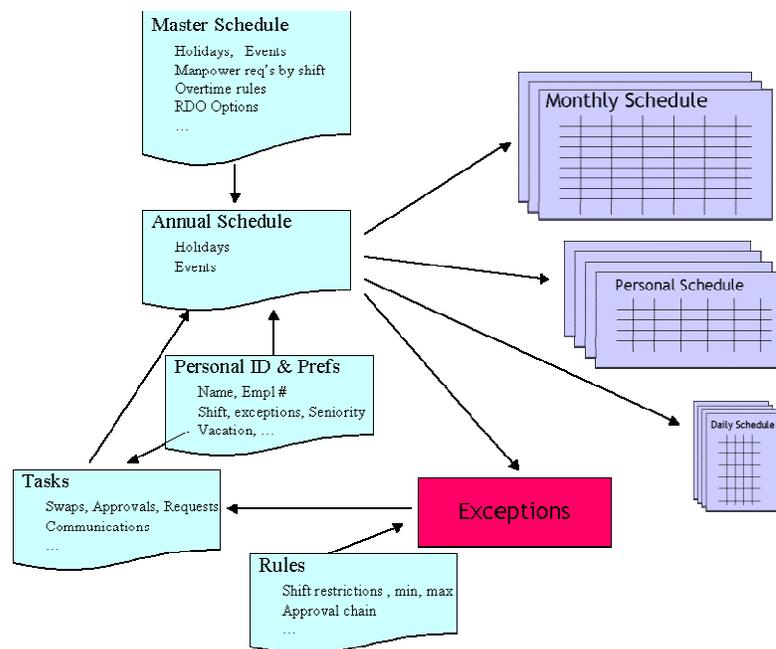
Schedule Express aggregates a master requirements schedule, personnel schedule preferences, rules and workflow definitions in order to automate the creation of daily schedules that conform to federal, state and local regulations. Additionally, best practices and chain-of-command processes are maintained, while reducing paper work and decreasing errors.

Operations

Management of the system is based on rules violations and exception handling. These exceptions include under and over staffed conditions, coverage plans, employee work-hours rules violations, overtime conditions, and more. If there are no listed exceptions, then the system will always provide a validated, legitimate schedule.

Master requirements schedules can be created on any level including monthly, quarterly, semi-annual, or an annual basis, and can be updated at any time. The master requirements schedule will be used to generate "exceptions" in understaffed and overstaffed conditions on a per job category basis.

Scheduling or supervisory personnel can automatically generate a monthly schedule that is based on personnel preferences and master requirements. This operational schedule can be modified at any time, with the same rules and exception engines triggering alerts. Thus management of the system is based on rules violations and exception handling.



Reports & Forms

The proposed solution will include many standard reports, along with the ability to create custom reports. Some of the standard reports include:

- Daily Staff Schedule
- Overtime Detail Report
- Weekly Timesheet Report
- Personal Schedule
- Seniority Report
- Schedule Summary Year-to-Date Report.
- Variance Detail Report (Absences, Trades and Overtime)
- Shift Patterns Report
- Training and Special Assignment Report

Access and Security

- All personnel will require unique identification and password
- Access to information will be granted based on user ID and role. For example, administrators can access any and all information, whereas other personnel may only gain access to their personal schedules.

Enterprise/Network Capabilities

- Web browser access
- Provides external access to schedules anytime, anyplace
- Secure/Reliable to enterprise standards
- Logging of all system transaction and activity

Hosting Facility

- 7/24/365 monitoring of the system
- Backup and recovery services
- UPS/Battery/Generator system for power redundancy
- Redundant HVAC and fire suppression systems
- 7/24/365 armed guard and physical security
- Virus protection and network firewall

Implementation & Deployment

Informer Systems will deliver a fully functional workforce scheduling and management solution. The major components of this solution delivery will include:

- Needs Analysis (data collection and configuration survey).
- On-site training that will include at a minimum user, supervisor, and administrator training.
- Maintenance of the service including items such as updates/upgrades, systems and data backup.
- Ongoing support of users as required.