

# IBM Intelligent Operations Center for Smarter Stadiums

*Delivering a safe, secure, and enjoyable experience to fans*



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## Highlights

- Leverage information across all stadium assets and departments for data-driven decision making
  - Anticipate problems to minimize the impact of disruptions to stadium operations and fan experience
  - Coordinate cross-stadium resources to respond to issues rapidly and effectively
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Stadiums are complex organizations, with numerous departments managing a wide range of essential services that affect the fan experience. From providing fine dining and premium entertainment, to managing security, facilities, concessions, and traffic flow for thousands of people each day, a stadium functions much like a city.

Like cities, stadiums face an increasing number of operational issues that affect the quality of services delivered to fans. To ensure a safe, comfortable environment and provide the quality of service that fans expect, stadiums must access an ever-increasing amount of information, facilitate real-time communication and collaborate with external agencies to address potential problems before they occur. A smarter stadium must be able to make the most of available information to make better decisions, anticipate problems to resolve them proactively, and coordinate resources for effective operations.

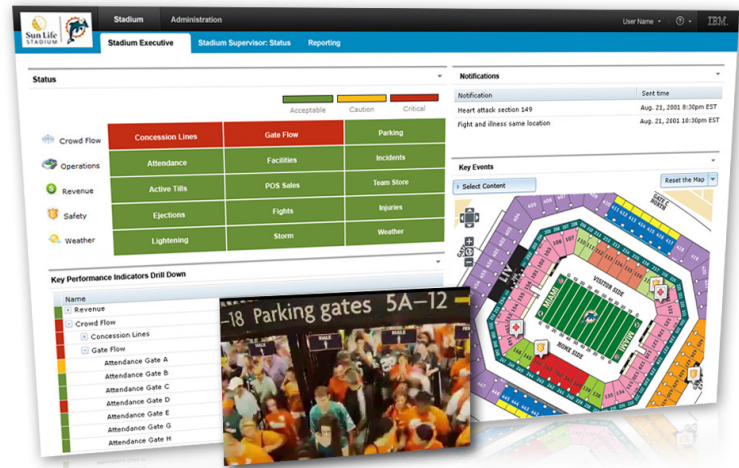


Figure 1: The IBM Intelligent Operations Center for smarter stadiums provides a single, consolidated view across all stadium services and operations.



## What is a smarter stadium?

For fans, a smarter stadium focuses on premium features and services to cater to various attendees. Behind the scenes, a smarter stadium is well managed, with integrated physical and digital infrastructures that make sure fans experience unforgettable events comfortably and securely.

A smarter stadium acts as a single entity, with integrated, interconnected subsystems in which individual departments and external agencies communicate significant event information to an enterprise dashboard. Smarter stadiums monitor and manage key performance indicators (KPIs) and predictive analytics to spot trends, anticipate problems, coordinate with external responders, and make informed decisions affecting overall service for any given event.

## IBM Intelligent Operations Center

Many stadiums struggle to achieve this level of effective and efficient operations and service delivery. By applying insight from over 2,000 projects from cities of all sizes to solve similar problems in large stadiums, the IBM® Intelligent Operations Center for smarter stadiums helps address these challenges.

The Intelligent Operations Center solution offers integrated data visualization, real-time collaboration and deep analytics to help stadium officials prepare for potential problems, optimize traffic flow and service delivery, expedite quick decision making, and enhance the fan experience.

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### Intelligent Operations Center for Stadium coordinates:

- Incident Management, Surveillance and Security
  - Public Safety
  - Concession and Point of Sale Optimization
  - Stadium Facilities and Asset Management
  - Crowd Flow Optimization
  - Transportation and Parking
  - Media Distribution and Communications
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The Intelligent Operations Center provides a single view of operations and services that are necessary to implement a smarter stadium. Once in place, the Intelligent Operations Center provides the tools to correlate and analyze information to identify potential problems, and collaborate and coordinate across all departments to mitigate problems rapidly. IBM clients have access to enterprise-class software, hardware and industry-relevant applications. IBM solutions are delivered using best practices developed by IBM and IBM Business Partners through more than 2,000 Smarter Cities™ engagements. With the Intelligent Operations Center approach, stadiums can achieve a fast return on their investment, reduce risk and gain the flexibility to extend their solutions to address future needs.

IBM Intelligent Operations Center for Stadiums helps stadiums integrate the most repeatable best practice patterns to allow stadium executives and operations personnel to:

- *Anticipate* problems and minimize the impact of disruptions
- *Coordinate* resources to respond to issues rapidly and effectively
- *Facilitate* collaboration across all service areas and departments

## Anticipate problems with proactive performance management

Leading organizations seem to be able to spot trends before they happen and anticipate customer needs before they are articulated. Using advanced predictive analytics, these businesses measure KPIs to spot trends and make informed decisions affecting the overall service to their fans for any given event.

IBM Intelligent Operations Center for smarter stadiums provides KPIs in near-real-time to help stadium operations management monitor and optimize the performance of stadium services, staff, fan attractions, and more. The Intelligent Operations Center for smarter stadiums helps transform raw data collected across stadium data feeds, such as surveillance cameras, infrastructure sensors, historical databases, concession systems, team stores, ticketing systems, and existing applications, into actionable insights. Executives and managers can adjust resource allocation or modify programs as results trend up or down.

**Smarter Stadiums**

<b>Instrumented</b>	IBM Intelligent Operations Center for smarter Stadiums facilitates collaboration by collecting data from stadium instrumentation and sensor data as well as external systems vital to operations.
<b>Interconnected</b>	The solution is designed to coordinate stadium resources by integrating data from multiple systems and enabling access to information via a web-based portal.
<b>Intelligent</b>	Executive dashboards integrate event information with KPIs and advanced analytics. The stadium can anticipate problems and improve event coordination for unforgettable fan experiences.



**Coordinate resources for rapid response**

Critical information is often stored in multiple disparate systems across disconnected departments, hindering situational awareness and making it difficult for officials to coordinate efforts. Without a single, integrated view of events, incidents or impending emergencies, or the ability to share information rapidly, stadium executives might be unable to maximize revenue growth or prevent negative impacts to the fan experience.

To achieve critical stadium objectives, managers need ways to monitor a range of stadium assets, from walkways and rest rooms to security vehicles and lighting. The Intelligent Operations Center for smarter stadiums integrates resource and asset management capabilities to help managers make sure that assets are available, well maintained and ready for use. A high-level heat map helps managers easily identify the most pressing issues in a geospatial context for situational awareness. Managers can then use drill-down capabilities to access details on service requests, project status, team members and assets.

**Facilitate real-time collaboration**

A real-time, unified view of departments and operations can help managers see who and what resources are needed and available. Officials who can rapidly share information across department lines can accelerate problem response, improve event coordination and deliver unforgettable fan experiences.

IBM Intelligent Operations Center for smarter stadiums offers a centralized, collaborative environment that processes data feeds and event information from crucial systems to present that information in a stadium-wide view. When incidents or events occur, officials can assess the situation, review operational status and coordinate with rescue personnel through a web-based portal. Meanwhile, stadium operations and staff representatives can view report details together, begin communicating instantly and start developing a recovery plan. Collaboration capabilities help accelerate resolution of problems, reduce the impact of crises and minimize the resources needed for getting work done.

On an ongoing basis, the Intelligent Operations Center can help enhance the efficiency of process management, allowing managers to link event planning to predefined business processes. Managers can choose to have processes set in motion automatically or manually when a planned or unplanned event occurs. Integration with the collaboration environment helps ensure that team members can work together efficiently on projects and events.

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#### IBM Smarter Cities provides guiding best practice patterns

- **Coordinating Resources:** IBM helps Amsterdam Airport Schiphol move 20 million more bags every year with a better baggage system
- **Facilitating Collaboration:** Peak energy loads fell by 15 percent when IBM helped homes in the Pacific Northwest talk straight to the grid
- **Anticipating Problems:** Predictive analytics helped slash Richmond's crime rate by 40 percent in one year

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#### Flexible deployment options

IBM Intelligent Operations Center for smarter stadiums offers both on-premise and software-as-a-service (SaaS) deployment models to provide options for stadiums of virtually all sizes with varying levels of IT resources.

An on-premise deployment features an industry-standard platform configured precisely for your purposes and ready for rapid installation. The IBM Intelligent Operations Center is designed to run on IBM System x® workload-optimized systems. The solution is complemented by around the clock support, IBM Services, and tiered usage pricing so organizations pay for only what they use.

For stadiums without the resources or skills for deploying and maintaining this solution, the Intelligent Operations Center is offered on the cloud. Stadiums can avoid unnecessary costs while still enjoying customizable workflows, dashboards and KPIs. IBM manages the solution, including backup, disaster recovery and availability, resulting in a lower total cost of ownership. Deploying the Intelligent Operations Center for smarter stadiums on the cloud allows organizations to start small and grow as needed for maximum business flexibility.

#### Helping to build a Smarter Planet

Today organizations need to provide robust services, drive economic growth, anticipate problems and coordinate their responses to crises, all while optimizing existing resources. IBM Intelligent Operations Center for smarter Stadiums is just one of several IBM solutions designed to help organizations work better by doing more with less. IBM can help stadiums optimize individual departments, including energy, operations, public safety, transportation and water, while facilitating seamless cross-departmental integration.

#### For more information

To learn more about IBM Intelligent Operations Center, please contact your IBM representative or IBM Business Partner, or visit: [ibm.com/software/industry/intelligent-oper-center](http://ibm.com/software/industry/intelligent-oper-center)

To learn more about all of the IBM Smarter Cities solutions, visit: [ibm.com/smartercities](http://ibm.com/smartercities)



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Software Group  
Route 100  
Somers, NY 10589

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