

Leverage the Power of ServiceNow for Mainframe and IBM i: AlOps-Driven Event Management



Introduction

When IT services go down, so does the business. Yet, the task of maintaining high availability and avoiding performance degradation is more challenging than ever. Poor visibility into IT operations has come about due to an explosion of data and the infrastructure that generates, stores and processes it. Multiple stacks – on-premises data centers, the cloud (private, public and hybrid), containers, virtualization, software defined compute, hyperconvergence and more – breed complexity.

To make matters worse, vital information resides in silos. IT is forced to hop between disparate applications to piece together the reason for a slowdown or the underlying cause of a snowstorm of alerts. It's an uphill battle resulting from too much data, out-ofdate information and a general lack of business context. That's why service degradation has become so difficult to overcome. Yet the consequences can be devastating. Outages and sluggish applications not only impact employee productivity, they reduce customer satisfaction and ultimately lead to lower revenue.



IT Operations Management (ITOM) tools on the ServiceNow platform offer a powerful way to keep the business up and running. ServiceNow encompasses a range of ITOM disciplines: service management, operations management, performance management, help desk, incident management, problem management, change management, configuration and event management. It consolidates disconnected monitoring tools into a unified view of the enterprise. This puts IT in control of the environment and engenders better decision making.





ServiceNow Event Management incorporates sophisticated Artificial Intelligence (AI) and machine learning techniques to sift through vast quantities of events and alerts to sort out the important from the routine. Events are correlated and prioritized, and alerts are generated that call attention to those requiring immediate action. This takes event management to a whole new level.

Yet there remains a missing element that is vitally needed to bring about comprehensive event management. Although ServiceNow monitors data from the bulk of IT systems out of the box, this doesn't include IBM i and IBM mainframe systems – leaving organizations with a blind spot. Since many services and workflows pass through these mission-critical systems, failing to take them into account can lead to incorrect decisions, faulty troubleshooting, downtime and lowered productivity.

The implementation of Precisely's Ironstream for ServiceNow makes it possible for ServiceNow's AlOps-driven Event Management to seamlessly access mainframe and IBM i data for the very first time.



Mining the Complexity of IT Operations

Charles Dickens' famous quote in "A Tale of Two Cities" could well have been written about the world of IT today:

"It was the best of times, it was the worst of times."

Times are good in that technology is enabling applications, businesses, and even entire industries, that weren't conceivable a decade ago. Technology underpins every business service across the organization, connecting what had been siloed processes and systems to optimize the experience of customers, partners and employees.

But there is a downside: complexity. IT can quickly lose visibility into what is running where – on-premises and, increasingly, across multiple clouds. On top of that, IT must deal with a labyrinth of relationships that are spread throughout countless numbers of applications, platforms, clouds, physical locations and workloads. If any one of these components goes down, it can impact every business service that depends on it.

Identifying issues and correlating events manually just doesn't work. It takes too long and the risk for errors is great. In addition, IT resources spent on these repetitive tasks means time is taken away from activities that can add value to the business.









ServiceNow is transforming ITOM from a world of proprietary tools that monitor distinct applications and platforms, to a unified, cloud-based management platform that provides a single system of record for all IT assets and automate IT management functions. Its AIOps capabilities empower IT teams to move beyond inefficient and ineffective manual event management to automatically identifying problems and resolving them fast.

But, no matter how powerful the platform is, it can only manage what it can see. If critical systems are left out of the ServiceNow platform, a significant blind spot exists. At best, this gap reintroduces the wasted time and effort that the platform is meant to eradicate. At worst, it puts the organization at risk.



An AlOps Approach to Event Management

The event management challenge

Event management is an area within ITOM that presents IT departments with a significant challenge. The sheer number of systems, services and configuration items operating can unleash a torrent of events. Assailed by thousands of notifications, it becomes difficult to separate out the important from the unimportant.

Multiple disconnected legacy monitoring tools transmit overwhelming numbers of emails and alerts. The service desk must spend hours wading through all this noise to identify real issues. Each one generates a siloed stream of data. These must be correlated and consolidated as disparate tools are often reporting the same issue. IT is tasked with manually eliminating redundancies before they can even begin to assess business impacts. Coupled with staff shortages and budget cutbacks, it is a recipe for lengthy service outages.



Taking event management to the next level

ServiceNow brings order to this confusion. ServiceNow Event Management brings events captured by existing infrastructure monitoring tools into ServiceNow for consolidation, analysis and action. These events are filtered to automatically eliminate duplicates, substantially reducing event noise. In addition, the platform identifies the potential service impact of prioritized events. IT no longer must sift through a mountain of data. Instead, it can focus on qualified alerts for affected Cls.





A dashboard provides a consolidated view of service health, enabling IT to easily identify and assess the state of business services impacted by alerts. By selecting an alert, IT immediately views impacted business services. Drill-down capabilities enable IT to dive deeper into problems to unearth root causes. Once identified, recommended remediations are provided and actions can be initiated from the same console.

As the quantity of events has mushroomed in recent years, ServiceNow has added AlOps capabilities to its event management module. Al, machine learning and big data techniques are harnessed to minimize the noise and help IT find the real issues. Companies deploying ServiceNow Event Management report as much as a 99% reduction in event noise, a 70% reduction in high priority events, and an 80% drop in service outages.

Leveraging AlOps to understand event patterns and sources, IT can respond far more rapidly and minimize service impact. Machine learning opens the door to rapid, efficient and accurate correlation of event data from all services, users, applications, cloud systems and related Cls. By providing laser-precise insights into anomalies and alerts, IT gains the ability to move out of a constant break/fix mode. Further, ServiceNow Event Management with AlOps makes it possible to detect potential future issues and to institute remedial actions to prevent outages.

Analysis of raw metrics from multiple monitoring sources is used to establish baselines for normal behavior patterns. When things deviate from those baselines, alerts provide IT with an effective early warning system. Over time, the system is continually learning about anomalous behavior to make even smarter decisions. This directly results in faster time to resolution, fewer outages and better service performance.

Solving the event management blind spot

ServiceNow provides powerful capabilities to gather data from all IT systems, discovering all CIs in the enterprise and providing real insight about all events – well, nearly all. If your organization is not taking the step to connect IBM mainframe and IBM i environments to your ServiceNow platform, this critical insight will be missing. Many vital relationships will be invisible, leading to wrong conclusions, bad decisions and extended downtime of your business services. After all, more than 2.5 billion business transactions run on IBM mainframe systems every day, and over 100,000 enterprises rely on IBM i technology to operate their most mission critical business services.

Precisely's Ironstream solution breaks down information silos and eliminates this blind spot in ServiceNow by collecting and forwarding machine data and events from these traditional IBM systems to the platform. With access to all mainframe and IBM i-related CIs and relationships, ServiceNow can be used to build a truly complete picture of the enterprise.



Ironstream for ServiceNow's lightweight architecture enables two-way communication between the IBM systems and the ServiceNow platform and provides flexibility to easily add functionality and custom probes, queries and messages. Organizations can leverage the same schedules, filtering, alerting and dashboards for IBM i and z/OS systems as they do to manage the rest of their IT infrastructure.

For the first time, companies can take full advantage of ServiceNow's powerful machine learning and AlOps to automate tasks, dispense with manual correlation, and provide insights that previously were impossible. This empowers IT to dramatically reduce the time and effort required to correlate events, automate problem resolution and safeguard against service interruptions.

Precisely Ironstream is the first and only certified product to directly integrate mainframe and IBM i system data into the ServiceNow platform. For more information on Ironstream support for ServiceNow Event Management, visit www.precisely.com.





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