Customer Case Study: Operational Efficiency Achieved with IT Ironstream[™] software Mainframe IT and Business IT Both Get Big-Data Benefits

Challenge

Organizations constantly look to extract more value from the operational data generated within their IT infrastructure, and to analyze that information to determine how their systems and applications are performing.

A primary source of operational intelligence for IBM z/OS mainframe users lies in the SMF (System Management Facility) records. These are recorded for just about every event and activity on the system. In order to extract such valuable information, organizations typically are saddled with the time-consuming manual processes of offloading the data, extracting the relevant records and fields, and then transforming the remaining subset with expensive tools like SAS.

Even then, essential questions remain unanswered, such as: What is happening now? Is what is happening now different than what was happening this same time last week or the same time one month ago? Can I predict or even prevent issues from impacting performance or adherence to service level agreements (SLAs)?

This process is then repeated across the multiple LPARs that exist in most organizations, making it even more timeconsuming and increasingly difficult to get complete visibility across the enterprise.

Solution

One major insurance company had been dealing with this challenge in the same way as most other organizations. They were offloading SMF data daily, extracting the required records and fields, then doing post processing using SAS to generate reports on the desired information.

As a possible alternative, however, they were intrigued by the concept of ITOA (IT operations analytics), by which their own data could be empowered to let them better understand and ultimately to improve their operations. And so they researched the leading ITOA vendors.



precisely

They then began to use Splunk® Enterprise for analytics and visualization of critical IT components. But they were still relying on those antiquated, labor-intensive processes to get z/OS SMF data loaded into Splunk Enterprise.

Discussing the problem with Precisely, and seeing a demonstration of Precisely's Ironstream for Splunk® solution, they quickly realized that Ironstream would enable them to process and forward SMF data to the Splunk Enterprise analytics platform in real-time, eliminating the manual process.

This combined solution will enable them to maximize their existing investments while fully leveraging the IBM Z platform, which offers advanced security, agility, resiliency, and performance.



Results

With Ironstream in place, the customer quickly expanded Splunk dashboard development to leverage the abundance of forwarded SMF and RMF data. They implemented a full range of operational analytics across their z/OS infrastructure, which gave them the ability to measure CPU utilization across general processors and zIIP engines, and to measure MSUs (Million Service Units) against the 4-hour rolling average window. All this ensured that they were not in danger of exceeding licensed capacity and incurring additional license charges. Some of the benefits they are able to realize using Ironstream with Splunk Enterprise include:

- Elimination of time- and resource-consuming manual processes for extracting and transforming SMF data.
- Historical trending of data forwarded by Ironstream[™] to Splunk Enterprise to provide a real-time view of what is happening now and how it compares to previous points in time.
- Correlation of MQ messages with CICS, showing transaction flows for critical services.
- Enterprise-wide view of resource utilization for all z/OS LPARs correlated into a single dashboard providing visibility beyond anything provided by existing legacy tools.
- Ability to monitor CPU utilization for general processors, zIIP utilization, and the 4-hour MSU rolling average versus defined capacity for all LPARs...and combine that into a single Splunk dashboard.

To learn more about Ironstream[™] for Splunk, visit: www.precisely.com