



Getting PayPal Real-Time Insights into Operations

Overview

PayPal knows that everything rides on the efficiency, effectiveness and trust of its websites. The company uses ServiceNow to manage incidents, problems and changes as well as IT assets and other core functions. Using ServiceNow provides PayPal with vital capabilities for the operation and continual improvements of its sites.

With so much activity going through ServiceNow, the platform has accumulated a tremendous amount of data. Mining that data is critical in bringing the ability to understand and assess the health and operational effectiveness of the sites. It can also uncover problems and challenges and get in front of them proactively.

“ServiceNow holds some very important data points for us, especially around incidents and changes to our extensive data center and orchestration of hardware and software components,” said Naveed Khawar, manager of analytics and service transformation at PayPal. “That data is important to us on a daily basis. We struggled because ServiceNow does not allow the extensive reporting capabilities we need. We really needed to expose the data.”

PayPal knew it needed to export data from the ServiceNow instance to a separate data lake so that it could be stored, and be readily accessible and available for processing by various visualization, analytical, dashboarding, reporting and database tools

Perspectium provides always-current integrations that can fully scale and deliver large volumes of data in real-time without performance drag.

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- Naveed Khawar
PayPal

The Challenge

Moving such large volumes of data from ServiceNow to the data lake was logistically challenging. First, the use of web services, internal ServiceNow API mechanisms and custom ETLs negatively impacted the performance of ServiceNow, making it more difficult for its technical team to use. PayPal could ill afford to impair the ServiceNow performance because they wanted end-users and the technical team to all use it without taking shortcuts or using some other method to get work done.

“We determined that we needed a *push* mechanism rather than trying to pull data out of ServiceNow,” continued Naveed. “Pulling data using the internal ServiceNow APIs caused too great of a performance hit. By pushing out data using Perspectium, we can move large volumes of data without impacting performance and usability.”

PayPal tried using in-house developers to create custom ETLs but saw that these took a long time to create and make ready for production use. It was a costly resource drain that was not sustainable.

Additionally, the custom ETLs needed to be maintained on an ongoing basis to provide scalability and continue working properly despite changes to ServiceNow, their own data schema within their instance, adding or changing data points and changes to data repositories and analytical or reporting tools. The yearly cost for this was at least half the cost of developing the initial integration. Worse, it was difficult to have the proper resources dedicated to maintaining these. Often the original developer was not available to do the required maintenance work. Putting a new developer on it put them at a considerable disadvantage since they did not understand the full details of the integration or the data and fields being moved.

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Another consideration was that because of the nature of financial information, it was critical to use end-to-end encryption to protect it and conform to all requirements.

And, the integrations had to be up all the time, 24x7. The ability to guarantee this with internal teams was simply not feasible.

Why Perspectium

Since Perspectium is an integration as a service, the full responsibility of providing and maintaining the integrations is on Perspectium. The customer does not have to bear any of that burden. Perspectium provides always-current integrations that can fully scale and deliver large volumes of data at high throughput rates.

Besides providing a complete service, Perspectium has expert understanding of ServiceNow instances and its data fields and structures. This gives the ability to have a contextual understanding of data and processes so that Perspectium can provide integrations with full context of all associated data and information. Not only can dashboards, reports and analytics get a complete picture, but processes can be seamlessly handed off to other applications, such as those for DevOps or systems maintained by a third-party service provider. Development/test instances and production instances can also be fully integrated, and several instances of ServiceNow spread across geographical locations or different divisions of the company can be united for seamless service and reporting.

The Results

Perspectium provided PayPal with:

- Complete, effortless integrations that were fully maintained and keep working despite any changes to ServiceNow, instance data schemas, applications or infrastructure
- High performance to move large amounts of data quickly without impacting the performance or responsiveness of ServiceNow
- Ability to provide real-time insight on data inside ServiceNow instances without concerns about performance degradation
- Reports are generated for business and finance users in more than 50 departments and teams, to help with auditability of internal operations
- Eliminated the need for special skills and training to use other ETL products or custom-built integrations
- Unlimited scalability
- A more cost-effective approach than creating and maintaining custom integrations
- Full 24x7 monitoring, availability and support
- Fully encrypted integrations that were protected at rest and in transit
- Ability to integrate with other ServiceNow instances or applications in the future.

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