How Do You Improve Insight About Your SAP Landscape?

LACK OF VISIBILITY INTO SAP ENVIRONMENTS IS A KEY CHALLENGE FOR ORGANIZATIONS TODAY. IMPROVING THAT VISIBILITY IS KEY TO BUILDING SUCCESS.

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Organizations continue to accelerate their adoption of cloud-based solutions and infrastructure. Recent SAPinsider research has shown that 74% of those planning on updating their infrastructure are looking at either private cloud or hyperscaler-based infrastructure. But this new infrastructure adds complexity to the environment both from a management perspective as well as in gaining insight into the status of those systems. Having this insight is essential to ensuring that the solutions and applications running on that infrastructure is available as and when needed by your users.

Adding to this complexity is the fact that most organizations are running a combination of both SAP and non-SAP solutions in their environments. While products like SAP Solution Manager may offer information about the status of your SAP applications, if not the underlying infrastructure, it provides no information on where those applications connect to non-SAP systems, or about the status of anything that isn’t in your SAP environment. Addressing this challenge can frequently require multiple monitoring tools, but this can result in a lack of transparency and has the potential to introduce more complexity.

The Monitoring Challenge
To learn more about these challenges and what organizations are doing to address them, SAPinsider sat down with Warwick Chai, Pradeep Bhatt, Gene Kaalsen, and Tapan Shah. Chai is the Director of Technology Innovation at SoftwareONE, Bhatt is the Global Product Manager for PowerConnect at SoftwareONE, Kaalsen is an SAP Solution Strategist at Splunk, and Shah is a Principal Product Manager at Splunk. With over 60 years of experience in the SAP and enterprise software space, this group had a lot of valuable information to offer on the topic.

According to Chai, standard SAP monitoring has two main deficiencies—an inability to answer relatively simple questions about system operations, and an inability to correlate data from non-SAP sources. An example he provided was about a situation where a user is complaining...
about system performance. “How slow is it?” asked Chai. “Is it isolated to a single user? Is this issue system wide? Is it trending up? Is it trending down? Has it been getting slower over weeks or months? Standard SAP tools simply don’t provide the functionality needed to perform this analysis. The data is all there because SAP has a rich set of data, but it can’t be accessed in a timely manner. Any analysis ends up being manual, and there aren’t any tools that provide a reporting capability.”

Bhatt agreed and said that there are often operational challenges for organizations that can come from the way that their SAP team works. “SAP is always a black box,” said Bhatt. “Only a team working on a particular system has information on what’s happening in that system. This leads to fragmented visibility across SAP teams. And when it comes to data correlation with non-SAP systems, that is almost impossible with standard SAP tools.”

Shah said that he has seen similar issues with monitoring SAP systems. Organizations may be using SAP Solution Manager for monitoring, but it does not provide information once data moves out of an SAP system or when data comes from a different system into SAP. But, and this is often more important, there is no insight into what is happening with different business services or business transactions. “Monitoring tools can be siloed,” says Shah. “They may monitor your infrastructure well, but can they monitor how users are experiencing the SAP portal when they’re using it? They won’t provide a notification about how, if a particular SAP NetWeaver ABAP system is down, business services or transactions may be impacted by that outage.”

**Lack of Visualization**

However, simply putting monitoring tools in place, and having the data from those tools, does not immediately improve insight into your environment. To do this requires a way of presenting and visualizing this data and, more importantly, connecting it to relevant KPIs that will help measure both system and process performance. Whether you are trying to gather more information on an existing landscape, or are in the process of updating or replacing systems and infrastructure, this is a crucial part of generating greater insight.

Kaalsen spoke specifically to this topic. “Embarking on a SAP cloud migration or upgrade project poses many challenges for customers. There are many interdependent components that need to be tracked. This is regardless of whether you are moving to a hyperscaler, hybrid cloud, or something like SAP HEC or RISE with SAP. Organizations need to be able to visualize seemingly different metrics and understand how they impact and affect one another.”

Kaalsen provided an example of a situation where a memory issue in the operating system might impact user memory roll-in and roll-out, which then impacts dialog and background work process response time, and can result in

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**KEY TAKEAWAYS**

IT landscapes continue to increase in complexity. A decade ago, all the enterprise solutions that an organization used were probably from the same vendor and were running on local systems and infrastructure. Today, that environment has changed completely. Few organizations are using just one vendor for all their solutions. Some solutions may still be running on-premise while others are already leveraging cloud-based infrastructure. Gaining insight into these landscapes is complex, but without that insight it can be impossible to effectively manage your environment.

- Thorough monitoring of systems must include both SAP and non-SAP information.
- Visualization and analysis are just as important as having tools in place for monitoring.
- Being able to combine monitoring data with business services and transaction data provides even greater insight.
Having data on what is happening in the system is the first step, but it is crucial that this information be available and readily consumed for it to be truly useful.

But if data is to be visualized, that must also be done in a timely manner. According to Chai, “SAP tools tend to do hourly batch refreshes. You want to see information within minutes of an event happening. In addition, the base data is aggregated in the source of origin or system of record, but can then be deleted after a month which means it’s lost for any sort of forensic analysis. Keeping data for six to twelve months is useful from an audit perspective, especially if that data can be kept in a separate system where data is available for audit and can be kept for long periods of time separately from where it can be changed or deleted on the SAP side.”

Addressing the Insight Challenge
SoftwareONE and Splunk are helping organizations address this challenge by the integration of SoftwareONE PowerConnect for SAP and Splunk Service Intelligence for SAP Solutions. The combination of these two solutions provides the monitoring across both SAP and non-SAP solutions through SoftwareONE PowerConnect for SAP, and the visualization, storage, and analysis of that information using Splunk Service Intelligence for SAP Solutions.

These two solutions working in combination provide insights that are not readily achieved using tools like SAP Solution Manager. SAP Solution Manager provides an analysis of the events in an SAP system on a larger scale but does not always provide all the features that organizations want. This is especially true when looking to combine the information in SAP Solution Manager with data from other sources. This could be financial data, data from non-SAP sources like network or system logs, or to consume all that data in one place.

To gain the insight that they need about the status of systems across their entire landscape, to be able to perform analysis of that information, and to remove siloes that currently exist when performing monitoring, organizations need tools like that which SoftwareONE and Splunk are offering. Not only does this sort of monitoring provide useful information out of the box, it can also be extended and customized to provide exactly the information an organization needs.

But what is most powerful with a system like this is the ability to not only include information from system monitoring but that it can be combined with other critical business information into a single dashboard. This might be data from custom tables in SAP systems, or dynamic alert thresholds that might warn of potential issues before they occur. But this could just as easily be leveraged to enhance security by analyzing audit logs which can be used to prevent breaches.

A last example of the type of dashboard that can be built utilizes information from both inside and outside SAP. From within SAP there is visibility to CPU and memory usage for example. But if your SAP systems are virtualized then there is no information available about the broader environment. A system like this can pull information from the servers the virtualized environment is using to provide a much broader perspective. This combination of SAP and non-SAP data is the most powerful way that organizations can visualize the status of their entire environment.
What Does This Mean for SAPinsiders?

Many organizations face challenges with monitoring their SAP systems today. While some may be content with the data that SAP Solution Manager offers, the greatest insight comes from being able to visualize a combination of data from SAP and non-SAP systems, infrastructure, and business services or transactions. What do you need to do to ensure that you need to do to make the most of your monitoring, and what can you do to improve your insight?

- **Explore your existing monitoring capabilities and understand what insight they provide.** Most organizations are running multiple monitoring tools across their landscape to provide them with the information they need to manage their environment. Some may be specific to an individual solution or infrastructure component, while others may play a larger role beyond just monitoring such as SAP Solution Manager. Whatever monitoring capabilities you have, spend time determining what information they provide and whether they are providing the insight you need to effectively manage your landscape.

- **Evaluate the visualization capabilities of your monitoring solutions.** It is not sufficient to simply have data about the systems that you are managing. You must be able to visualize that data for it to be useful. This could be as simple as loading log files into Microsoft Excel, or as comprehensive as that offered by Splunk Service Intelligence for SAP. Whatever data you are collecting, you must ensure that you have a means to visualize that information so that it can be readily consumed and available to drive your system analysis and planning.

- **Investigate ways of expanding your monitoring and visualization so that it can provide the insight you need for operational success.** The best way to provide greater insight into your landscape is to add more value to the information you already have, not to add more monitoring tools. Combining information on business processes and from non-SAP sources enriches the value of the data that you are gathering from your SAP systems. This will provide much greater insight into your landscape. Tools like those offered by SoftwareONE and Splunk that combine monitoring across the landscape with visualization and integration of additional sources can provide a platform that can help reduce outages and provide improved decision-making.