

Making Sense of SAS® Environments

ESM HELPS DIAGNOSE ISSUES ASSOCIATED WITH LARGE MULTI-USER SAS ENVIRONMENTS

A USER SUCCESS STORY



Frontline is a magazine distributorship in the UK that handles the entire supply chain - from printer to store - for Bauer Media, Immediate Media Company, and Haymarket Media. They also have two subsidiary companies, Seymour International and Gold Key Media that handle the supply chain for third-party clients. Within the UK Frontline distributes 3,500 to 4,000 different magazines to roughly 55,000 outlets. Their challenge is getting the right magazines in the right quantity to the right outlets at the right time. The company relies on 20 analysts who - since 2005 - use SAS™ heavily on a daily basis for conducting predictive analysis, pricing trials analysis, A/B testing, forecasting and other forward looking analysis. While SAS is embedded in several business processes, the analysts are the real heavy users of SAS.

COMPETING FOR IT RESOURCES

Each night data is collected from wholesalers, retailers, POS systems and Frontline's own systems as orders are generated. No matter the source, the data is normalized and stored in an Oracle database. Analysts then download the data they need to a SAS environment on a daily basis.

It is most important that analysts get all the data they need as quickly as possible. Over the years, as the team grew, they used more and more sophisticated techniques for their daily analysis of tens of millions of rows of data. Soon, they were competing with each other for limited IT resources and were literally on the path to grinding the company to a halt. They saw that analytical processes that should take an hour or so were taking days to complete.

Will Cook, a Commercial Insight Manager, said, "Our biggest problem was we couldn't find the source of the slowdown. Was it network? Was it Oracle? Was it SAS? But because we felt it was coming from our analyst teams it all just got blamed on SAS. To us, SAS was a big black box that no one really understood. We had a lot of questions about what was causing the problem and how to fix it. What we didn't want to do was buy more hardware or throw money at database processes, only to then find that that was not the problem at all. We couldn't determine if it was the changes that we had made to the way the data was being worked, or if it was the network, or Oracle or SAS. There was no real pattern that we could see."



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IDENTIFYING THE PROBLEM

Will and the IT team had numerous conversations with SAS and were introduced to Boemska to do a SAS upgrade. Nik Markovic, Boemska's founder and CTO, designed the new target architecture. Performance gains were immediate. 45 minute processes ran in 5 to 10 minutes. The upgrade gave Frontline a massive performance boost.

"But then we quickly fell back to the same problem," said Will. So, Nik installed Boemska's Enterprise Session Monitor for SAS (ESM), an application designed to diagnose issues associated with multi-user Analytics environments of all sizes and highlight potential causes of system instability.

What ESM showed very quickly was that a lot of the performance issues were not coming from SAS at all. SAS was actually doing everything perfectly. Instead, there was a lag when accessing the Oracle database. That helped Will and the IT team to put the business case together to upgrade the network links between Oracle and the SAS servers. It also enabled them to have substantive conversations with Oracle, since they knew that SAS was fine.

SUCCESS

Will relates, "The thing that really made it a success for us is, one, the Boemska ESM tool, and two, that we could go to Boemska with questions and get an instant answer. That was massive. I've not come across anyone else that's been able to explain and demonstrate SAS as well.

Will continues, "We have opened ESM up to many of our analysts. If they are working on developing a merge, or bringing in data, they can actually have ESM open and track what the process is doing. If it's close to blowing the SAS work space, or if it's taking an amount of resources that we didn't expect, ESM can shut it down instantly in a controlled fashion without letting it impact the rest of the business."

A POSITIVE SURPRISE

Will states, "The positive surprise was visibility. To all of a sudden have this visibility of what is going on beneath the hood and how easy it is to understand that is terrific. I can sit here and monitor what my team is doing in terms of CPU, memory, or workspace, and that has greatly improved the way we work. We're getting the most out of the system without having a technical knowledge of what's going on.

"We are quite a small business. There's only 150-200 employees, so when the key in-house system goes down or is running slow, everyone knows about it - even at the senior director level. With the help of Boemska's ESM we were able to reduce the number of performance issues, the number of outages and the amount of time that our people spend solving issues with our IT department. Everyone has noticed that the amount of downtime has been substantially reduced.

“ESM has given us a lot more confidence in making recommendations to senior management. We are going to spend big bucks buying additional servers, additional SAS software and network upgrades, and ESM has given us the confidence to take these actions.”

Will Cook ,
Commercial Inside Manager, Frontline
