



April 21, 2009

## SevOne Tackles Network and Application Performance Management

SevOne delivers a scalable network and application performance management system (delivered as an all-in-one network appliance) that offers everything from comprehensive functionality (including SNMP, IP SLA, NetFlow and NBAR) and ease-of-use to fully customizable reports and graphs specific to the technologies in which you're interested, such as VoIP and virtualized servers. SevOne's Performance Appliance Solution (PAS™) helps major enterprises and service providers such as Comcast and Cincinnati Bell to improve operational efficiencies across their unified communications environments. The performance of even a complex organization can be managed from a single web-based view. Potential problems can be indicated and dealt with before they occur, service levels can be managed, and you can employ predictive capacity planning, and analyze your network in real-time.

When asked about the possibility of achieving the "El Dorado" of high automated, self-healing networks, Mike Phelan, CEO and President of SevOne, says, "I have a background working in the artificial intelligence field. I used to work for AI Lab, and some of us left to start the company Symbolics, where I ran the Philadelphia office. It's funny how we see the same terms are re-emerging, with people saying things such as 'Self-learning networks', 'Self-healing networks' and 'Self-intuition systems'. Actually, I do believe such things are coming. We're aware of various automated thinking layers can be added to a system. The industry analysts love to talk about those, because they're sexy. But what the world needs, of course, is to traverse the major steps to get there, which requires an enormous amount of R&D."

"As a choice we decided to stick solely in the performance space of network management," says Phelan. "Performance is a discipline that can cross over into fault detection, configuration and in some cases into security. But we've decided that that's what's needed most relates to performance. The surprise to us was just how important network performance has become to three industries: We found that there's an awful lot of pain in the financial space, the telco/communications space and in the healthcare space. Let me put that in concrete terms: One of the top three financial institutions in the world that we are reading about in the newspapers in December 2008 and early 2009, purchased over half a million dollars in performance software from us at the end of December 2008. That tells me there's a real pain there, which really surprised me. Initially, I thought the deal wasn't going to happen. These guys are experiencing too much turmoil to make such a purchase, and yet they did so. And what was their reasoning? As it turns out, like many similar firms, they were under tremendous restructural pressure to consolidate and merge internal resources and they didn't have the visibility or transparency to see their infrastructure, because of the limitations of their

legacy tools. They needed the kind of toolset that would let them have what we call 'Performance Transparency'. They need that same kind of transparency in performance that they enjoy with their financial transactions."

Phelan elaborates, "As an example, imagine a trading floor customer and they have hedge fund customers and as the market is tanking, if they give a transaction over to this trading floor and they cannot prove that they're handling it in an expeditious, efficient way, that company will lose a lot of money. Someone can call up this trading floor and say, 'Last Thursday at 2:30 p.m. I put a \$20 million transaction through, and you guys sat on it for three minutes while the market collapsed, and that cost me \$8 million. So you need to have the performance transparency in place so that call never happens – the customer should be able to go to a web portal and just see that the firm that they've given responsibility to handle their transactions have the capacity to take care of any given transaction expeditiously. And then they have to be able to prove that they did it – there must be an audit trail too as part of that performance transparency."

### **Performance Issues are Everywhere**

"Of course we focus on performance," says Phelan, "and, to a certain extent, if you have a hammer, everything looks like a nail. But we're also seeing very large entities experiencing the most turmoil who are making decisions to spend money because they really must meet compliance requirements and they have a responsibility that, if they're going to compete in this new world, they must be able to show to all their internal and external clients that they've got the wherewithal to perform. So we see performance issues, because that's what we do, and we've decided to keep doing it as the 'hot point' during 2009. A number of analysts have also shown that performance is becoming a major concern. One survey of network managers and where they're going to spend their money in 2009 revealed that it was going to be in performance."

"These entities are under tremendous pressure," says Phelan, "and the tools that they've used until now do not let them have the performance transparency that they need. The tools just don't adapt. We just closed on a very large deal – one of the world's top two providers of online information, whose name I don't yet have permission to use – and they've gone through mergers and consolidations. Their business is providing information. So the circulatory system for that information flow consists of circuits, routers, switches, satellites, applications. Their tools need to have much more 'granularity' – there are certain things that the company has to see, sometimes down to the second. You find the same situation in the financial world. If you're responsible for things that are real-time, you need tools that are real-time in nature too. The performance tools that have existed in the world until now have not been real-time. They're things that may poll every three, four or five minutes. Now let me circle back to artificial intelligence and the concepts of self-healing networks. You need a 'nervous system' better than what you find in, say, an amoeba. You can't have something where you figuratively put your hand on a stove and not realize for five minutes that it's hot, and now you're going to make the system artificially intelligent. It just doesn't work. There are some major technical jumps that have to occur."

"Vess Bakalov, SevOne's CTO, has real-world experience working in a transaction-rich financial environment," says Phelan. "At BankOne he held a number of senior technical positions, including Assistant Vice President and Network Architect. He also led the network management team for the Credit Card Services division, the largest issuer of

VISA credit cards in America. He was deeply involved in network performance issues. Because of all of all of the consolidation in the banking, he inherited two of all of the legacy tools and he was asked to use these. He was very frustrated as to how they were working. At night he was teaching undergraduate and graduate courses as an Adjunct Professor of Computer Science at the University of Delaware. He noticed that the tools he was using at the bank were 25 years what he was teaching at night, which included things like peer-to-peer architectures, Web 2.0, Linux operating systems, open APIs, and so forth. So Bakalov and a good friend – who was also an adjunct professor and was also responsible for a large financial system architecture – got together in 2003 and grabbed some of their super-smart students to rewrite the tools so they would work they way they should. There were a number of frustrations with the original software found in use in communications companies, healthcare institutions, and so forth. For example: Everything is going over IP now. If you're a hospital, you're even putting your X-ray images and MRIs over your IP network, probably to India to be read and then sent back. At the same time, say you have a relative hooked up to a transfusion pump. That information is being monitored over IP now. This leads to issues involving quality of service. In the case of VoIP, there are products you can buy that give VoIP traffic top priority, because you don't want noticeable packet latency, loss and jitter when it's sent through a network. But if you install a system, an appliance say, that gives phone conversation packet traffic top priority, and your network is suddenly experiencing a deluge of phone calls, and all of these take precedence over the data coming from a transfusion pump, then you've probably got yourself an ethical and perhaps a legal problem."

"You need what can be called granularity, visibility or transparency in terms of performance that you didn't need back in 2006 or even 2007," says Phelan. "As more types of traffic travel over IP you've got to know what they are and when they're happening. We uncover all sorts of craziness. For example, we'll find that all of the departments of a large company will be running backup operations at the same, and it crushes three other things. The company didn't know it, because they couldn't see or resolve those spikes down into what they actually were. So there's a real need for performance transparency. You need to see things in a much more granular manner and in real time. The tools that people were using simply didn't do that. I said previously that I was in the artificial intelligence field. Let's call this 'accidental intelligence'. We're 'accidentally' in one of the very hot spots in this industry. We felt that performance was important, so we're pleasantly surprised that the world has found it very important too."

### **Four's a Crowd?**

"Venture capital people think this is a crowded market," says Phelan, "But it's different when we get out there and compete. Take Comcast, for example. They're a multimillion dollar customer for us. We're monitoring over 1.4 million units there now and those companies who competed for that business a year-and-a-half ago were the same big four you generally hear about in this industry: IBM, HP, BMC and CA. There's also a handful of three or four smaller players. So the entities that compete in the performance marketplace that have a scalable, mature product – you can count on one or two hands. There are a few strong players. Naturally, we see ourselves as one of these. We're aware of what NetQoS does, they have some real strengths in flow-based technologies. We have some different strengths, such as when somebody needs to combine all of the various agent list polling technologies into one platform. We win in those environments."

If somebody's just looking at a NetFlow-based engine, NetQoS is strong competitor there."

Vess Bakalov, SevOne's CTO, says, "There are many things that we do in this space. One of the things we've found in speaking to our larger customers is that they begin to understand that the only way to achieve the efficiencies of, for lack of a better phrase, 'the new information economy' – realizing 'one view' in terms of virtualization and consolidation of services – involves having a clear path of communication between all corporate departments. Comcast was the first place where we really saw this idea 'written on the wall'. Until last year, they maintained a group in one location responsible for creating and distributing performance reports to all of their local groups. That centralized management simply wasn't working for them. It wasn't fast enough, it wasn't flexible enough. They needed a platform that they could open to their end users that all of their users could trust from the server guys to those employees in the field working on the cabling infrastructure, to the people doing the router provisioning. When a problem occurs, they would immediately know whether it's a QoS problem or a problem resulting from high dB loss, or whether it's a problem because somebody is running too much BitTorrent. The way to deal with this combines flow technology along with just old school basic element technology, with things like WMI [Windows Management Instrumentation] and server agent monitoring. We have combined all of this under a 'single roof' application that these departments now use as a common platform in which to communicate with each other. We still feed our events data into CA's Spectrum Network Fault Manager, so we are still a performance management system. But the data in Spectrum is then used to drill right back into our system, so we do have a bi-directional integration. We also have a very flexible API and we always believed that having integration among your various systems is a big plus for any tool out there."

"I honestly can't imagine why someone would want to charge for their API," says Bakalov. "It's something that should just be there with the product and should not be for sale. If the customer wants us to make our product work with their existing environment, great, if they don't want to do it, that's okay too."

***Richard Grigonis is Executive Editor of TMC (News - Alert)'s IP Communications Group. To read more of Richard's articles, please visit his columnist page.***