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With John W. Thompson, CEO at Virtual instruments



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John W. Thompson, CEO of
Virtual Instruments



Virtual Infrastructure Optimisation: Medicine for the nervous and circulatory systems

DCS talks to John W. Thompson, CEO at Virtual Instruments, about the need for end users to proactively manage their physical and virtual IT infrastructures - in terms of performance, availability and utilization optimisation – helping to prevent business-impacting outages.

DCS: Can you provide some background on the company in terms of when it was founded, the key personnel etc.?

JT: Virtual Instruments (VI) was spun out of fiber-optic communications equipment supplier Finisar in June 2008. Finisar primarily sells to system and storage OEMs like IBM, HP, EMC, Cisco, Brocade and HDS, but not to enterprise IT end-users. VI was initially formed to exploit existing Finisar SAN monitoring technology, called NetWisdom, and apply it to enterprise environments. The company has evolved substantially over the last 2+ years, with an entire new suite of software and hardware products designed completely by the Virtual Instruments engineering team. Thus far we have been able to double sales in each of the past 2 years, so I am very pleased with the customer adoption rate of our SAN and Virtual Infrastructure Optimization products.

We are fortunate to have a very strong leadership team here at VI, including our VP of Engineering, Barry Cooks who came to VI from VMware and Sun

Microsystems before that, VP of Sales Sean Maxwell (EMC, QLogic, McData), VP of Services Bo Barker (EMC, PeopleSoft), VP of Marketing Len Rosenthal (Panasas, QLogic, HP), and CTO Skip Bacon (Oracle, Seibel) to mention a few. Overall, we are about 80 employees, almost double the number we had at this time last year. Given the combination of an exciting new market category (Virtual Infrastructure Optimization) that we compete in and the success of the company, we are able to attract top talent across the company, both in the US and Europe.

DCS: And what were the key technology drivers behind the formation of the company – what gaps in the market did you see?

JT: Virtual Instruments is benefiting from 2 major industry trends that are driving our growth. The first is the increasing use of virtualisation technologies, both for the server virtualisation and storage virtualisation. Virtualisation abstracts the IT architecture and inhibits visibility into what is really happening inside of the

virtualised IT environment. To successfully deploy virtualised applications, IT managers need real-time visibility into both the physical and virtual infrastructure to enable them to optimize performance, availability, and utilization. The 2nd trend is the massive growth in stored transactional data, which Gartner projects to be growing over 50% annually over the next 4 years. This tremendous growth is leading to very large, complex, multi-vendor SAN and storage infrastructures that are increasingly having problems that lead to business-impacting outages. There is a critical need to proactively find these problems before they affect end-users and that is one of the key advantages of Virtual Instruments.

DCS: What technology/products have been brought to market to date?

JT: We have 2 primary product lines in the company. VirtualWisdom is our software application that allows IT managers to visualize their infrastructure in real-time as well as all relevant historical trends. It provides the essential infrastructure

performance, availability, and utilization data in an easy to use customizable widget-based dashboard and reporting interface that is used by IT managers and system/storage administrators. SANInsight is the family of hardware monitoring products that enable the capture of real-time data on Fibre Channel SANs. The key to getting access to this data is our Fiber Optic TAP Patch Panel System, which acts as an optical splitter, like a cable splitter in your house, and non-obtrusively copies a portion of the fibre-optic signals (light), that is then routed to our ProbeFCX appliance for real-time data capture.

DCS: And how well have they been received – do your customers understand them, or need some education as to what's going on?

JT: Once our VirtualWisdom and SANInsight products are installed, they quickly become indispensable to their everyday jobs. The products are like having a dedicated full-time team of administrators constantly watching the virtualised infrastructure for performance slow-downs, transmission errors, and opportunities to improve server and SAN utilization. At the beginning of a customer engagement, we typically do have to answer the questions about how we are different from their existing vendor supplied tools, but once they learn about solutions, they immediately understand how Virtual Instruments provides the only vendor-independent real-time monitoring solution for business-critical applications deployed with Fibre Channel SANs.

DCS: Can you provide an in-depth insight into the problems facing end users that Virtual Instruments' technology is designed to address?

JT: The problem is deploying business-critical applications with virtualisation technology while adhering to

performance and uptime service level agreements (SLAs). Applications like order processing, ERP, medical records, and stock trading are primarily deployed on Fibre Channel SANs as they are heavily I/O intensive. Getting transaction visibility into the SAN is impossible without a hardware device that can extract Fibre Channel frame data. When one combines the lack of visibility within the SAN with the complex, multivendor abstraction layers of server and storage virtualisation, trying to figure out why a virtualised application is slow or is down is a major time-consuming process of trying to find a needle in a haystack. This is the problem that we at Virtual Instruments are solving – helping customers deploy virtualisation without the risk of performance or availability concerns. We process the haystack and instantaneously give you the needle!

DCS: And where are we on the virtualisation adoption 'curve' right now? And how can VirtualWisdom help accelerate this process? Do end users still have concerns over application performance in a virtual environment – and are these concerns legitimate?

JT: Although virtualisation is heavily being deployed today in nearly every enterprise data center, it is still primarily for test and development, file services, web services, and perhaps some small Exchange environments. The virtualisation of business-critical applications, typically built on databases, is just beginning to be deployed. Most enterprise IT organisations are hesitant to deploy virtualised business-critical applications due to the fact that they can't guarantee performance or availability SLAs. With VirtualWisdom and SANInsight, IT managers have comprehensive real-time visibility into both the virtual and physical infrastructure. This enables them to resolve problems quickly and more

importantly, to proactively prevent problems from slowing down or bringing down applications. VirtualWisdom allows IT organisations to increase their use of virtualisation and reap the substantial OPEX and CAPEX savings associated with virtualisation and virtual infrastructure optimisation.

DCS: Is the SAN side of your business still important, or merging into the whole 'virtual world'?

JT: Given that over 75% of virtualised applications are deployed with Fibre Channel SANs, understanding the performance, availability, and utilisation of the SAN is central to nearly all business-critical applications, both in the physical and virtual worlds. The server is analogous the nervous system in the human body whereas the SAN is like the circulatory system. You can't function without either and both need to be periodically checked for problems.

DCS: Can you summarise the benefits of both SAN and virtual infrastructure optimisation for end users – what will they notice in their IT environment?

JT: The primary benefits are higher application performance, accelerated deployment of virtualisation technology, substantially reduced downtime, faster problem identification and resolution, and higher server and SAN utilisation. This all translates into noticeably lower OPEX and CAPEX for the organisation. To continue on with my human body analogy, Virtual Instruments is like an MRI device. We comprehensively see inside the body, find the root cause of problems, and allow you to proactively take action to prevent future problems.

DCS: Can you give details of the successes you have had to date in terms of developing strategic

partnerships with OEMs, the Channel, and in different geographical areas?

JT: Our most significant formal partner relationships are with VMware, Hitachi Data Systems and Dell. We are critical to VMware's success as they can't easily deploy virtualisation into mission-critical applications without Virtual Instruments. HDS and Dell are both global resellers of our products and have been instrumental in many large sales for us such as HBoS (now Lloyd's Bank), eBay and SAIC. We also work closely with EMC, IBM, HP, Brocade and Cisco. For example, IBM brought us into the European Central Bank and HP introduced Virtual Instruments to Unilever, who has turned into one of the largest customers for VI. We are just beginning to ramp up our European channel partnerships, but we do have strong regional partnerships with partners such as Virtue in France and Menatnet in Germany.

DCS: And what is your go to market strategy moving forward – in terms of reaching OEMs, the channel and end users direct?

JT: We are still primarily a direct sales model company. In most cases, we are responsible for creating demand for our products and ensuring our prospects understand the full value of our VirtualWisdom and SANInsight solutions. We have a strategy of intelligently fulfilling our products via whatever method our customers choose to purchase. We sell with many partners and HDS, Dell, IBM, EMC and Brocade have all resold Virtual Instruments solutions. Most times, large companies prefer buying from the major vendors and that's fine with us.

DCS: What presence do you have across the world now – in terms of both sales and after-sales support? Any plans to increase this?



JT: We have sales offices in about 10 cities across North America and have sales offices in the UK, Germany and France today. We have been expanding both our US and European presence this year and are looking to expand into the Asia Pacific region, perhaps in our next fiscal year. When we hire in a region we typically hire a Regional Sales Manager, a technical pre-sales System Consultant and a post-sales services professional.

DCS: What new technology can we expect from Virtual Instruments?

JT: We prefer not to pre-announce our products, but our general product development directions revolve around supporting higher capacity Fibre Channel interfaces, supporting Fibre Channel over Ethernet as that becomes deployed in mission-critical applications and improving our overall analytics and ease-of-use. Our latest VirtualWisdom 2.0 release, which we released in June of this year, was a major re-design of our core software, especially with the user interface. Our products are now truly enterprise class and dramatically easier to use than the prior versions (NetWisdom).

DCS: So how do you see Virtual Instruments products helping to address the current buzz topics such as virtualisation, The Cloud, and convergence?

JT: Virtualisation is really a pre-requisite for cloud computing, especially for

private clouds, which is where our primary focus is right now. Maintaining application performance and availability SLAs in the cloud is the same problem as proving SLAs in any virtualised environment. It is essential that IT managers have real-time visibility into their private cloud infrastructure, especially if they are running business-critical applications within the cloud. Virtual Instruments is the only company that alerts you to real I/O performance issues across both virtual and physical IT infrastructure.

DCS: Are you able to give a couple of brief examples of customer successes?

JT: We have been very successful across a broad range of customers. Virtual Instruments has seen the strongest adoption in Financial Services, Healthcare, Retail, Communications Services, Manufacturing, and Federal Governments. Our customers include Lloyd's Bank, Barclaycard, Bank of America, Finanz Informatik, Groupama, Kaiser Permanente, Unilever, eBay, AT&T, ConocoPhillips, US Department of Energy, McKesson, and Logica to name a few. They all have similar characteristics: large data stores with 40%+ annual data growth, running business-critical applications that are very performance and uptime sensitive, are increasingly using both server and storage virtualisation, and finally, are very concerned about OPEX and CAPEX.