

## ComputerWeekly - Neon makes IBM z-Series glow

By Clive Longbottom, Service Director, Quocirca Ltd

Neon Enterprise Software has been providing software to the mainframe markets to optimise systems management, application and database performance since 1995. It has carved itself a respectable niche in a market that, far from suffering the death envisaged when the PC and the mini-server came to market over 20 years ago, still provides IBM with a very respectable part of its revenues.

For IBM, the mainframe has gone through a bit of a renaissance, as such systems have become more cost effective, required less management resource, have standardised at the hardware and software levels and have also opened up to be able to run Linux as well as IBM's own z/OS (nee MVS). But the biggest change in mainframe direction has been the launch by IBM of "specialty engines" - separate processor units that allow specific workloads to be offloaded from the mainframe central processors, and run on lower-cost specialty processors run within the mainframe.

The difference is in the usage models; software run on central processors is paid for on a MIPS basis, whereas the specialty engine is a costed as a one off fee. Therefore, adding MIPS as central processors changes the software licence costs, adding specialty engines keeps the cost the same.

IBM has two types of speciality engine - the zIIP (System z integrated information processor) and the zAAP (System z application assist processor). Each is focused on different areas of mainframe work, but each has the end result of speeding up overall performance, while minimising the need for new mainframe central processor MIPS to be bought - and so to collapse the operational cost model.

zIIPs and zAAPs have been so successful that they now account for around 60% of IBM's mainframe MIPS shipped. But, as shipped, they only do certain things - this is where Neon comes in.

Neon's zPrime enables the mainframe to offload almost any z/OS workload to the specialty engine, and to do it in an intelligent manner. If the specialty engine is already fully utilised, the workload will run on the central processors. However, if there is room on the specialty engine to run a workload there, then that engine will be utilised. Through basic setting of priorities, the user can decide which workloads can be run effectively on the lower-cost specialty engines rather than on the central processors, so running on the fixed price processor, rather than the MIPS-based central processors.

Neon's own analysis with early-stage customers shows around a 20% saving for the customer in hardware and software costs. And this is where things could get interesting.

Firstly, Neon seems to have caught IBM a little unaware - IBM has rushed out a response to zPrime, warning users that IBM has yet to fully understand how zPrime works, and what impact this could have on any workloads. The underlying message seems to be "caveat emptor", and looks like a knee-jerk reaction from IBM in trying to shore up its true mainframe software sales.

But it looks as if zPrime could be a good thing for IBM to embrace. Much of the mainframe asset base is still on older systems, which are becoming very expensive to run and maintain, with far higher power and cooling requirements than the newer systems. With the S/390 and even older z series servers, it is marginal as to whether they should be upgraded - but any upgrade review may come down on the side of moving away from the mainframe completely.

If the overall cost of acquisition of a z9 or z10 could be reduced by even 10%, the decision becomes easier. At 20% it starts to be a bit of a no-brainer. If Neon's figures are correct, zPrime could help drive the upgrade cycle for mainframes, providing IBM with far higher

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z9/z10 sales, an uptick in zIIP/zAAP sales, and a renewed focus on the mainframe.

Indeed, in many situations, a highly virtualised mainframe running z/OS and Linux as a cloud platform makes a great deal more sense than a massive estate of x86/x64-based racks. If zPrime can make the financial equation easier for a buyer to swallow, all to the good.

IBM's first response seems to be a little narrow minded and short sighted. However, IBM is not as slow as it used to be, and generally figures things out pretty rapidly. The chances are that zPrime will start to appear in IBM GBS's toolkit in the not too distant future, enabling a more flexible approach in mainframe sales.

## About Quocirca

Quocirca is a primary research and analysis company specialising in the business impact of information technology and communications (ITC). With world-wide, native language reach, Quocirca provides in-depth insights into the views of buyers and influencers in large, mid-sized and small organisations. Its analyst team is made up of real-world practitioners with first hand experience of ITC delivery who continuously research and track the industry and its real usage in the markets.

Through researching perceptions, Quocirca uncovers the real hurdles to technology adoption – the personal and political aspects of an organisation's environment and the pressures of the need for demonstrable business value in any implementation. This capability to uncover and report back on the end-user perceptions in the market enables Quocirca to advise on the realities of technology adoption, not the promises.

Quocirca research is always pragmatic, business orientated and conducted in the context of the bigger picture. ITC has the ability to transform businesses and the processes that drive them, but often fails to do so. Quocirca's mission is to help organisations improve their success rate in process enablement through better levels of understanding and the adoption of the correct technologies at the correct time.

Quocirca has a pro-active primary research programme, regularly surveying users, purchasers and resellers of ITC products and services on emerging, evolving and maturing technologies. Over time, Quocirca has built a picture of long term investment trends, providing invaluable information for the whole of the ITC community.

Quocirca works with global and local providers of ITC products and services to help them deliver on the promise that ITC holds for business. Quocirca's clients include Oracle, Microsoft, IBM, O2, T-Mobile, HP, Xerox, EMC, Symantec and Cisco, along with other large and medium sized vendors, service providers and more specialist firms.

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