'Software the cornerstone in building business networks in Africa' – KEMP Technologies

With hardware taking a back seat in Africa and more operations on the continent looking to leverage private/public cloud to strengthen networks and manage enterprise data centres, the scene has been set for the role of software and virtualisation in scaling today's operations.

Experts in ICT infrastructure development and application delivery controllers (load balancers) have identified stronger reliance on software on virtual machines and standarised servers to control operational functionality as a significant trend.

The reality of Africa's evolving ICT sector is that virtualisation, whether it be on servers, storage, hybrid cloud or software defined network, is now considered a viable replacement to that which was once the domain of application-specific integrated circuits (ASICs) and proprietary hardware.

And what is driving this trend? Leadership at KEMP Technologies, global provider of load balancers, believes the increasing relevance of Moore's law has changed the dynamics in terms of infrastructure capacity.

A white paper produced by KEMP Technologies states, "… increasingly powerful standardized multi-core servers (are) capable of handling most of the heavy-lifting that once required dedicated, proprietary hardware."

Peter Melerud, co-founder and CMO, KEMP Technologies, echoes a key point of the research saying that software and the cloud are now positioned ahead of hardware and location in today's datacentres.

Not an overnight switch

This transition has not happened overnight… it was not a case of immediately replacing one set of datacentre infrastructure management technology with another.

Melerud says the company has worked closely with a software-first ADC paradigm for some years. As a recognised ADC solutions supplier, the onus has been on the business to ensure that it has remained first with the provision of software-centric ADC solutions.

Up front cost is one of the benefits of software ADC solutions over proprietary network hardware. Melerud underlines one of the points raised in the company's research which states that hardware running on specialised ASICs is more expensive than the average ADC software solution running on a standard server.

"For businesses in Africa that is a major consideration," says Melerud. "From a cost perspective the upfront cost for specialised ADC hardware was expected and accepted because infrastructure- like standardised processors, operating systems and servers – could not match the load balancing performance of a dedicated box designed with a highly specialised ASIC. That is no longer the case and today's standard multi-core datacentre servers have enough processing power and memory to run multitudes of virtual machines and applications."

The size of Africa's market, the dynamics of doing business on the continent and unique regional market requirements have to be taken into consideration before any solutions are developed and rolled out. Indeed, these have to be carefully checked,

tested and technically scrutinised to ensure they meet requirements, address challenges and suit the environment.

Issues such as total cost of ownership, agility, scalability and modularity remain key considerations for operations in Africa. These all have the potential to impact on the ability to leverage infrastructure investment.

This is why software-centric ADC solutions that are designed to handle the volume and capacity required from load balancing technology in order to strengthen the network and reinforce data centres has to add value in all of these considerations.