

SA needs SDN to keep it all together

By Johan de Villiers, Managing Director, First Technology

Software Defined Networking (SDN) is taking the rest of the world by storm as organisations seek greater control, performance and management across the data centre and the network; and recognise the benefits SDN can offer in terms of cost savings on capital and operating costs, improved network performance, increased productivity, and improved security.

However, new research shows South Africa is behind the adoption curve. First Technology and Extreme Networks recently polled 200 South African business respondents, including 6 CIOs, 43 C-suite executives, 70 IT managers and 81 IT professionals on their views on SDN and the cloud, which is closely aligned with SDN.

Surprisingly, 30.5% of respondents said they didn't know what SDN was; 27.38% had no plans to adopt an SDN strategy, and 11.81% did not believe SDN would benefit them. 27.83% said their companies were not using SDN and had no plans to do so, 48.11% said their companies were currently embarking on SDN strategies, and 24.06% said their companies were already SDN-enabled. In a market expected to top \$132 billion globally by 2022, South Africa is lagging, even though local survey respondents said their top network priorities right now were performance (35.42%) and security (33.96%) – all areas where advanced new SDN platforms offer solutions. Extreme Networks' EXOS Linux-based operating system, for example, supports fast and flexible yet consistent provisioning, programmability and heterogeneity across platforms.

The majority of respondents believed their companies were somewhat ready (41.06%) or completely ready (38.16%) ready for Software Defined Networking. However, 20.77% said their companies were not ready for SDN. South African IT professionals who had no SDN strategy reported that complexity (47.26%) and cost (40.93%) stood in the way of adoption.

As SDN maturity is closely linked with cloud adoption, South African respondents were also asked about their companies' current level of cloud adoption. The largest proportion (37.71%) reported some private cloud use. 16.53% reported some hybrid cloud use, 15.68% said they made some use of public cloud, and only 14.83% reported that their companies made extensive use of the cloud. 15.25% reported that their companies made no use of the cloud at all. Respondents said the main factors hampering their companies' optimal use of cloud technologies were security concerns (35.12%), control and management concerns (27.09%), cost (26.76%) and limitations caused by existing infrastructure (11.04%).

The SDN and cloud concerns can be easily overcome, however. Advanced new solutions such as Extreme Networks' SDN deliver open-standards, comprehensive platform that makes it easy for any organisation to deploy SDN solutions, regardless of their size or in-house skills. Organisations can now migrate their existing networks without expensive forklift upgrades. They can accelerate application innovation and reduce risks for the entire network. They address complexity concerns through modular, open and standards-based development environments that integrate with existing infrastructure and avoid architecture lock-in, while also offering edge-to-core management that addresses enterprise concerns around security, control and management.

In the South African survey, respondents believed the top benefits of SDN were centralised security (22.77%), centralised network provisioning (22.28%), lower operating costs (15.35%), holistic enterprise management (12.87%), cloud abstraction (8.17%) and guaranteed content delivery (6.93%). These results are in line with [international trends](#), where SDN's benefits are well recognised.

A software-defined approach to business and IT accelerates digital transformation and addresses key concerns among South African IT managers and CIOs; and SDN is increasingly recognised as the architectural model most capable of aligning with the 3rd platform for IT. In a hyper-connected world, SDN has never been more important for keeping it all together, and South Africa needs to move faster to overcome its concerns and catch up.