

Juniper reveals software-defined networking (SDN) ambitions at its Global Partner Conference, with a 6-step plan to "directly address the most pressing networking challenges facing the industry today."



The company insists its vision for SDN is different from the current approach, specifically that set by OpenFlow. Juniper breaks down networking into four layers (double the amount OpenFlow describes)-- management, services, control and forwarding.

Within the Juniper SDN stack management, services and control are centralised, while forwarding remains distributed.

The software runs on the JunosV App Engine, a virtualisation software running on industry-standard x86 hardware set to ship in Q1 2013.

Juniper makes use of [recent acquisition Contrail Systems](#) for the technology behind its centralised SDN controller. Using the border gateway protocol (BGP) and the XMPP protocol already in use in most Juniper hardware, the controller connects multiple network and security services in series across devices within the network.

The Juniper stack gives preference to the KVM hypervisor, Open vSwitch virtual switch and OpenStack cloud controller, as well as VMware and Microsoft virtual switches and hypervisors.

Juniper also announces a change in network software pricing through Software Advantage-- a licensing and maintenance model allowing customers to transfer software licenses between Juniper devices and x86 servers.

Juniper Outlines SDN Ambitions

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