Portable Packet Processing Software Supports Intel Data Plane Development Kit

6WIND announced the availability of its 6WINDGate software with optimized support for the Intel Data Plane Development Kit (Intel DPDK).

Already deployed by a wide range of OEMs worldwide, 6WINDGate enables the development of best-in-class mobile infrastructure and cloud networking products. To support exponential growth in Internet data and video traffic, next-generation equipment must deliver increasing throughput while providing support for intelligent networking and advanced security protocols. Ever-increasing levels of packet processing must be provided with on-going improvements in energy efficiency, while shrinking product lifecycles dictate that application software must be reused to the maximum extent.

To address these requirements, 6WINDGate uses the advanced architecture of Intel multicore processors, fully integrating the powerful packet processing framework and multicore execution environment provided by the Intel Data Plane Development Kit software to deliver compelling networking performance while retaining full compatibility with standard Operating System APIs.

On a dual-Intel Xeon processor E5645 platform with a clock speed of 3.33GHz, running the Intel DPDK, 6WINDGate delivers over 16 million packets per second, per core of IP forwarding performance, thereby forwarding 10Gbps of network traffic in each core (64-byte packets). This performance scales linearly with the number of cores configured to run 6WINDGate until the maximum bandwidth of the hardware platform is reached. Processor cores not used to run 6WINDGate are available to run value-added application software or Virtual Machines (VMs), resulting in a highly efficient and flexible system for advanced networking equipment.

6WINDGate provides a comprehensive, portable suite of networking protocols optimized for multicore platforms. These include a full set of control plane modules (routing, security, connectivity, mobility etc.), a high-performance networking stack and a wide range of fast path protocols (IPsec, QoS, protocol termination, VLAN etc.) optimized for processors such as the Intel Xeon processor family. 6WINDGate eliminates the need for OEMs to invest their engineering resources into combining discrete protocols from multiple sources and/or designing custom optimizations to exploit the performance features of the processor they have selected.

“We are pleased to release our support for the Intel Data Plane Development Kit as part of our on-going support for multicore Intel architecture solutions”, said Eric Carmès, CEO of 6WIND. “The 6WINDGate software enables high-performance, software-based networking for cloud equipment based on Intel architecture platforms, while eliminating the time-consuming in-house software development that adds risk to product launch schedules. Many of our clients have already used

the 6WINDGate software to develop industry-leading networking products based on Intel architecture processors. We look forward to continued business success as a result of our close collaboration with Intel in developing solutions for future Intel platforms."

"The Intel Data Plane Development Kit is a software library that enables packet processing software to showcase the true performance potential of multicore Intel architecture platforms. Commercial solutions such as 6WINDGate enable customers to quickly implement workload consolidation, enabling not only high performance packet processing but also control plane and application workloads, all on Intel architecture" said Jim St. Leger, technology marketing manager for Intel's Embedded and Communications Group.

In order to further accelerate their clients' development process and minimize schedule risk, 6WIND provides the 6WINDGate software pre-integrated with the Intel DPDK, along with full technical support for the combined solution. This integrated package avoids the need for clients to perform the integration themselves and ensures seamless synchronization between revisions of 6WINDGate and Intel DPDK.

6WINDGate support for the Intel DPDK is available now. For more information please visit http://www.6wind.com/ [1].

Posted by Janine E. Mooney, Editor

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http://www.wirelessdesignmag.com/product-releases/2011/11/portable-packet-processing-software-supports-intel-data-plane-development-kit?qt-digital_editions=0

Links:
[1] http://www.6wind.com/