ORBexpress Doubles Message Throughput Using INTEGRITY 10 on Dual-Core PPC

Continuing its lead in enabling application developers to easily port their applications to multicore platforms, Objective Interface Systems, announced that its ORBexpress product doubles message throughput when used with Green Hills Software INTEGRITY 10 real-time operating system (RTOS) with symmetric multiprocessing (SMP) on a dual-core processor.

The INTEGRITY RTOS provides complete SMP support that is optimized for embedded and real-time use. SMP support enables developers to realize the performance potential of multicore architectures while maximizing software reuse. ORBexpress provides a high-performance communications framework for INTEGRITY 10, enabling real-time and embedded systems to communicate seamlessly with ultra-low latency.

ORBexpress was designed and implemented from its inception with a multi-threaded architecture, fully supporting SMP for inter-process and intra-process communications. This enables ORBexpress to scale seamlessly in a multicore environment. Applications built with ORBexpress can therefore take advantage of the performance provided by additional cores of modern processors without changes to their source code. With ORBexpress, SMP support is automatic and requires no additional programming effort from application engineers.

“Our tests showed that operation invocation throughput doubled when moving from a single-core to a dual-core PowerPC at the same clock speed,” said Kevin Buesing, the Director of Technology Services from Objective Interface Systems. “This performance gain was achieved using INTEGRITY 10 without modifying the test application code or recompiling the test image.”

“The same architecture that makes INTEGRITY the leader in safety and security in real-time operating systems enables INTEGRITY to scale for multicore processors,” said David Kleidermacher, Chief Technology Officer, Green Hills Software. “INTEGRITY 10 combined with ORBexpress offers embedded developers an easy path to migrate their mission-critical systems to multicore architectures while maintaining their investment in their high quality code.”

Visit Green Hills Software at www.ghs.com [1].

For more information and product evaluations, visit www.ois.com [2].

Posted by Janine E. Mooney, Editor

December 13, 2011

Source URL (retrieved on *12/20/2013 - 1:39am*):
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