

## **Sharing Code Across VxWorks and Nucleus PLUS Using OS Changer for New Developments**

### **Overview**

ST Microelectronics in Raleigh (formally Alcatel) uses OS Changer in the residential Gateway project. They used OS Changer to share code across VxWorks & Nucleus PLUS. They “used OS Changer in an ARM9-based ASSP to provide a reference solution for a DSL Residential Router/Bridge. The software included a BSP, device drivers, configuration database, HTML UI, bridge/router-ware, and OS-independent layers (for future porting). These parts were integrated with a proprietary DSL modem library and commercial RTOS and stackware (ATI Nucleus and NucleusNet). Protocols included TCP/UDP/IP, NAT, RFC1483/2684, AAL5, SPAN, RIP2, and DHCP. Because VxWorks support was on our product roadmap, we opted to use the VxWorks I/O interfaces instead of native-Nucleus interfaces to minimize time, effort and costs associated with development and maintenance. As a result, we chose to use OS Changer from MapuSoft to provide the VxWorks interfaces on top of Nucleus.” – Mike Williams, ST Microelectronics

#### **□ How was the technical support?**

“There were no issues with the product. In addition, we are very happy from a technical support standpoint. In the rare cases where we found a minor issue or when we had questions, MapuSoft's technical support team was outstanding.”

#### **□ Did the product meet your expectations and requirements?**

“Our impression of the OS Changer product was very favorable. The software had a high level of quality and stability. OS Changer is part of the router product we developed here in Raleigh, and the product is now in the field meeting all the requirements. Two DSL router products have been qualified and released running Nucleus, Nucleus protocol stacks, and MapuSoft's OS Changer. These products meet all the physical and network layer performance requirements levied by the DSL Forum, and the entire software suite is extremely stable.”