# VXWORKS 7 ACCELERATION AND TUNING SERVICE

Given enough time, your engineers can research choices, prototype designs, and then make optimal decisions for the use of VxWorks® technologies. To save time and money, collaborate with Wind River® Professional Services to accelerate your development timeline and optimize your software. Let Professional Services VxWorks engineers apply their knowledge and expertise to your specific projects and development environment. Our experts consider your system and application requirements and help expedite and optimize a solution.

### FOCUS ON YOUR NEEDS

Professional Services experts consult with you to understand the challenges your team is facing. Working with your key contributors, we provide assistance to address your specific business and technical needs. Areas where we can provide technical expertise include:

- Packaged components
- Safety standards
- Requirements specific to certain markets, such as aerospace, industrial, automotive, or networking
- Virtualization technology
- Security technology such as Secure Boot, secure networking, and secure architectures
- Networking protocols
- Graphics solutions
- Migration of board support package (BSP) and drivers
- Wind River Workbench/tool suite configuration for customers' use case, development/ build environment, workflow, etc.
- Dynamic code insertion (patching)
- Multi-core support: asymmetric multiprocessing (AMP), symmetric multiprocessing (SMP), hypervisor
- Kernel optimization (e.g., microkernel)
- Optimization using new technologies

# DESIGN AND TUNING

Professional Services can help design and tune your product software in the following areas (e.g., to meet performance requirements):

- System design: architecture, data flows, trade-offs
- System timing analysis
- System performance analysis

- Driver optimizations
- Memory usage
- Compilation time, boot time, run time
- Task scheduling
- Multi-core architecture
- Hypervisor configurations (single core, multi-core, AMP, SMP, etc.)

#### **VXWORKS 7 MIGRATION OPTIONS**

Wind River offers multiple options to help your team with migration of your products or programs to VxWorks 7 and maximize the benefit of investing in VxWorks 7 technology. Wind River VxWorks 7 experts can:

- Review the technical design via whiteboard discussions with your team
- Examine system configuration and application design considerations and make recommendations
- Ensure new VxWorks 7 technology is being applied optimally in your product design
- Mentor your development team with the more challenging areas of porting code, helping to reduce risk and schedule; mentoring can be provided onsite at your facility or remotely
- Perform some of the migration effort, so your team can do the portions that they are comfortable with while Wind River does the remainder
- Assist your team with debugging issues
- Perform a risk analysis on migration options
- Analyze reliability and failure modes
- Verify your team's BSP port using the VxWorks Validation Test Suite to ensure that you can be confident deploying the new solution to the field
- Provide a complete turnkey port of the platform, application, and testing with the VxWorks Validation Test Suite on the BSP and additional tests that have been developed by your team

#### LEVERAGE OUR EXPERTISE

Whether your concerns are centered on system architecture, migration strategy, or performance optimizations, you can leverage Professional Services engineers with years of experience in the embedded software industry to accelerate your program. Our developers are:

- Constantly trained and up-to-date on Wind River technologies
- Familiar with hundreds of technology use cases
- Experienced with most processor architectures and hundreds of hardware components

In addition, they understand the challenges of embedded software systems and can:

- Address specific technical needs and concerns
- Assist your team in reducing time-to-market
- Reduce project risks

Wind River is the one company that puts it all together for you with industry-leading products, lifecycle tools and support, and world-class professional services.

## CONTACT WIND RIVER

Wind River Professional Services welcomes the opportunity to discuss VxWorks 7 Acceleration and Tuning Services as they apply to specific customer needs. For further information, please contact your local Wind River sales representative by visiting <a href="https://www.windriver.com/company/contact/index.html">www.windriver.com/company/contact/index.html</a>, calling 800-545-WIND (9463), or sending an email to <a href="https://www.windriver.com">inquiries@windriver.com</a>.



Wind River is a global leader in delivering software for IoT. Its technology is found in more than 2 billion devices and is backed by world-class professional services and customer support. Wind River is accelerating digital transformation of critical infrastructure systems that demand the highest levels of safety, security, performance, and reliability.

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