



SAFETY PROFILE FOR VXWORKS 7

COURSE DESCRIPTION

The Safety Profile for VxWorks® 7 course provides engineers familiar with existing VxWorks products with a fast, cost-effective way to acquire the skills necessary to use Safety Profile for VxWorks to build and configure systems that include one or multiple instances of the Real-Time Network Stack.

After this course, participants will be able to perform the following:

- Implement RTP time partition scheduling
- Implement RTP access control for resources and system calls
- Build a certifiable Safety Profile system
- Set and use a JSON configuration file
- Configure and start the RTNET stack in the kernel
- Configure and start the RTNET stack in an RTP

PRODUCTS SUPPORTED

- Safety Profile for VxWorks 7
- Wind River® Workbench 4
- Wind River Simics® 4.8 (as simulated targets for labs)

COURSE FORMAT

- This one-day, expert-led add-on session consists of lectures and lab sessions.
- Attendees use VxWorks 7, Safety Profile for VxWorks, Wind River Workbench 4, and Wind River Simics to gain experience with the topics presented.
- Participants examine and exercise simulated target systems in hands-on labs.
- Participants receive individual guidance from an expert engineer who has extensive experience with Wind River technologies.
- This course is only available as an add-on session to augment other Wind River courses. It is not available as a standalone course.

AUDIENCE

- Developers who will work with Safety Profile and Real-Time Network Stack

Course title:	Safety Profile for VxWorks 7
Duration:	One day add-on to other Wind River courses
Format:	Instructor-led lectures and hands-on lab sessions; instructor-led Live Remote delivery available
Content:	Day 1: Safety Profile for VxWorks 7; VxWorks 7 Real-Time Network Stack

- New project members on teams already using Safety Profile or Real-Time Network Stack
- Senior engineers who want to evaluate Safety Profile and Real-Time Network Stack technologies

PREREQUISITE SKILLS

- C programming experience, including familiarity with basic control structures, pointers, structures, and preprocessor commands
- Functional knowledge of Linux or Windows host operating systems
- Basic VxWorks development experience

PREREQUISITE COURSES

- VxWorks 7 and Workbench Essentials

RELATED COURSES

- VxWorks 7 Board Support Packages and Device Drivers

SYLLABUS

Day 1

SAFETY PROFILE FOR VXWORKS 7

- Overview
- RTP time partition scheduling
- Access control for public objects, directories, and files
- Access control for memory resources
- Access control for system calls



- Certifiable Safety Profile configuration
- **LAB: Using the Time Partition Scheduler**
- **LAB: Building a Certifiable Safety Profile System**

VXWORKS 7 REAL-TIME NETWORK STACK

- RTNET stack overview
- RTNET configuration file
- Running the RTNET stack in the kernel
- Running the RTNET stack in RTPs
- RTNET stack and certification
- **LAB: Using the Real-Time Network Stack in an RTP**

GLOBAL REACH OF WIND RIVER EDUCATION SERVICES

With more than 30 years experience delivering software for intelligent systems, Wind River provides education services in every region of the world. Our private classes can be tailored to your needs by adding or removing topics from multiple courses. If you have more specific project challenges, Wind River Mentoring provides coaching by experienced engineers to help you integrate Wind River solutions into your environment. And when you're too busy to attend a whole class, our On-Demand Learning options provide around-the-clock access to advanced and specialized topics. All of our education services are led by expert engineers who are closely connected to the Wind River technical community for access to specific expertise.

CONTACT US

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