COURSE DESCRIPTION
The Wind River® Intelligent Network Platform Essentials course provides engineers and testers with a fast, cost-effective way to learn to use Wind River Intelligent Network Platform to build high-performance products that accelerate, analyze, and secure network traffic and applications.

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

• Fully utilize capabilities of modern multi-core processor architectures and advanced networking chipsets to increase networking performance
• Configure, build, and deploy various Intelligent Network Platform–based L2–L4 data plane applications
• Integrate Intelligent Network Platform with existing networking applications and develop new native Intelligent Network Platform networking applications
• Develop Intelligent Network Platform–based deep packet inspection applications

PRODUCTS SUPPORTED
• Wind River Intelligent Network Platform 3.4
• Wind River Workbench 3.3

COURSE FORMAT
• This two-day, expert-led course consists of lectures and lab sessions.
• Students receive personal guidance from expert Wind River instructors.
• Students use Intelligent Network Platform and Workbench to gain experience with the topics presented.
• Participants examine and exercise simulated network topologies in hands-on labs.
• Participants receive individual guidance from an expert engineer who has extensive experience with Wind River technologies.

AUDIENCE
• Developers involved in data plane packet processing on Intel® Architecture general purpose processors
• System architects and system integrators involved with the design of control and data plane systems

PREREQUISITE SKILLS
• Intermediate knowledge of data plane IP packet processing
• Intermediate knowledge of Linux

PREREQUISITE COURSES
• None

RELATED COURSES
• Intel Data Plane Development Kit with Wind River Linux
SYLLABUS

Day 1

INTELLIGENT NETWORK PLATFORM OVERVIEW
- Features
- Supported hardware platforms
- Supported software platforms
- Development workflow

INTELLIGENT NETWORK PLATFORM ARCHITECTURE
- System architecture
- Control plane
- Data plane
- Intelligent Network Platform components
  - Wind River Application Acceleration Engine
  - Wind River Content Inspection Engine
  - Wind River Flow Analysis Engine
- Application Acceleration Engine components
  - Network acceleration engine
  - Intel Data Plane Development Kit (Intel DPDK)
  - Intel QuickAssist Technology

INTELLIGENT NETWORK PLATFORM WORKFLOW
- System prerequisites
- Intelligent Network Platform installation
- Intelligent Network Platform configuration and build
- Intelligent Network Platform deployment
- LAB: Intelligent Network Platform configuration and deployment

Day 2

INTELLIGENT NETWORK PLATFORM FUNCTIONALITIES
- Link bonding and aggregation
- VLANs
- IPsec
  - Tunneling mode
  - Transport mode
  - QuickAssist Technology
- QoS
  - QoS implementation
  - RSS
  - Flow director
  - Flow Analysis Engine
  - Virtual routing and forwarding (VRF)
  - L3 forwarding
  - Intelligent Network Platform application programming
    - L4 termination
    - Developing native Intelligent Network Platform applications
    - Porting existing networking applications to Intelligent Network Platform—socket interception
  - Deep packet inspection (DPI)
    - Content Inspection Engine—Intelligent Network Platform integration
    - SNORT—Intelligent Network Platform integration
  - Intelligent Network Platform utilities
  - LAB: Intelligent Network Platform L2 VLAN
  - LAB: IPsec—transport mode
  - LAB: Intelligent Network Platform L3 forwarding
  - LAB: Intelligent Network Platform VRF
  - LAB: Intelligent Network Platform QoS with strict priority queuing (SPQ)
  - LAB: Intelligent Network Platform L4 termination and socket interception

GLOBAL REACH OF WIND RIVER EDUCATION SERVICES

With more than 30 years of device software experience, 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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