VxWorks

- It is a real time operating system developed as propietary software by Wind River Systems.
- Designed and used in embedded systems which requires real-time, deterministic performance as well as safety and security certification.
- Supports AMD/Intel architecture, POWER architecture, ARM architecture and RISC-V.
- Can be used in multicore asymmetric multiprocessing (AMP), symmetric multiprocessing (SMP), mixed modes and multi OS designs on 32 and 64 bit processors.
- Consists of a set of runtime components and development tools.
  * Run time components are an operating system, software for applications support and hardware support.

Optional advanced technology for VxWorks provides add-on technology-related capabilities:
- Advanced security features for safeguard devices and data traveling across Internet of Things.
- Advanced safety partitioning to enable reliable application consolidation
- Real time advanced visual edge analytics allowing autonomous response on device in real time.
- Optimized embedded Java runtime engine enabling the deployment of Java applications.
- Virtualization capability with a real-time embedded Type 1 hypervisor.

Applications of VxWorks:
- Aerospace and defense
- Automotive
- Consumer electronics
- Industrial
- Medical
- Networking and Communication infrastructure.

- VxWorks comes with the kernel, middleware, board support packages, Wind River Workbench development suite and complementary third-party software and hardware technologies.
- OS kernel is separated from middleware, applications and other packages for modularity and upgradeability.