# WIND RIVER

# Powering 30 Years of Innovation

# **Timeline**

#### 1981

- Jerry Fiddler, a former employee of Lawrence Berkeley National Laboratory, starts Wind River in a Berkeley, California, garage. Early Wind River customers include the National Football League (game film editing and reviewing technology) and Francis Ford Coppola (unique film editing system).
- Wind River is named after Wyoming's Wind River mountain range, where Jerry Fiddler often vacationed. Jerry Fiddler wins a coin toss with employee No. 2, David Wilner, also a former employee of Lawrence Berkeley National Laboratory, and becomes Wind River's first chief executive officer. Wilner becomes lead engineer.
- John Fogelin joins Wind River as a college student looking for computer science experience and eventually becomes chief technology officer in 2001.

# 1987

• Wind River introduces VxWorks, now the de facto real-time operating system for embedded devices.

# 1993

• Wind River becomes the first embedded computing company to go public.

# 1995

- VxWorks launches into space on the NASA Clementine moon probe.
- The Tornado integrated development environment is launched and wins *EDN*'s Embedded Development Software Innovation of the Year award as the first graphically oriented development environment for embedded. Tornado was John Fogelin's brainchild, who formed the idea while on sabbatical in France.
- VxWorks is selected for the avionics system on the B-1 Bomber (used for combat in Desert Fox in 1998, in Kosovo in 1999, and in Iraq and Afghanistan).

# 1997

- Wind River expands its presence to Asia Pacific with the opening of its South Korea office.
- VxWorks, the real-time operating system for NASA's Mars Pathfinder mission, lands on Mars.
- Wind River acquires RST Software, forming Wind River Israel.

#### 1998

- Two VxWorks-powered satellites, Lunar Prospector and Clementine, find ice on the moon.
- Wind River moves to new 36-acre main campus in Alameda, California
- VxWorks is selected for NASA's space shuttle Checkout and Launch Control System, replacing the Launch Processing System in use at the Kennedy Space Center.

# 1999

 Wind River acquires the industry's second largest real-time software maker, Integrated Systems Inc. (ISI). The pSOS real-time operating system, SingleStep debugger, and Diab compiler technologies are available today.

# 2000

- VxWorks is chosen for NASA's Mars Exploration Rover mission.
- Wind River acquires Embedded Support Tools (EST) in Canton, Massachusetts; AudeSi, Calgary, Canada; and Rapid Logic, California.
- Wind River acquires its first open source technology company, Berkeley Software Designs Inc., signaling a business model shift.

# 2001

- Running on VxWorks, Mars Odyssey orbits Mars (and is still in service).
- VxWorks is chosen for NASA International 01 Space Station's X-38 "lifeboat" spacecraft, an emergency crew return vehicle, or lifeboat, for the International Space Station.



#### 2002

 Wind River wins N+I Best of Interop Award for Networked Storage Technology.

# 2003

- Wind River wins Best Product of Show award at RTS Embedded Systems 2003.
- Wind River wins Design Solution of the Year at Electronics Industry Design Awards.
- NASA's Mars Exploration Rovers, using VxWorks, launch from Earth.
- Wind River joins the Eclipse Foundation, an open technology tools community.

# 2004

- Wind River officially enters the embedded Linux market, a shift to a unique dual-operating system model, by announcing plans for a Carrier Grade Linux platform targeting the communications infrastructure industry.
- VxWorks is certified to the industrial safety standard IEC 61508 SIL3.
- Wind River Workbench, the Eclipse-based integrated development environment, is born.
- VxWorks 653 is chosen for the Boeing 787 Dreamliner, running 60 applications at different levels of safety criticality.
- NASA's Mars Exploration Rovers, Spirit and Opportunity, powered by VxWorks, land on Mars.
- Wind River wins Best of Show award and best aerospace and defense product at the Embedded Systems Conference for the Mars Exploration Rovers project. Wind River also wins the communications award for software powering The Weather Channel's Intellistar.

# 2005

- VxWorks Cert is chosen for the Northrop Grumman X-47B Joint Unmanned Combat Air System demonstrator (a tailless strike fighter-sized unmanned system).
- Wind River is named "Cool Vendor" by Gartner in the "Cool Vendors in Application Development, 2005" report.

# 2006

- Wind River acquires Sweden-based Interpeak and adds a world-class embedded networking stack that includes networking, security, and mobility middleware, enabling nextgeneration devices to connect securely to the Internet.
- SELEX Communications uses VxWorks to develop the prototype of an innovative software-defined radio (SDR) solution for naval platforms or fixed land stations.

#### 2007

- Wind River is named Frost & Sullivan 2007 European Automotive Software Company of the Year.
- Wind River acquires Romania-based ComSys to strengthen professional services in Eastern Europe.
- Wind River joins Google's Open Handset Alliance as an original Linux commercialization partner, marking its foray into the mobile business.
- Wind River advances the state of embedded software quality testing with the launch of Wind River Test Management, an automated software testing solution for monitoring, executing, and managing embedded device software testing.
- VxWorks is used in Thales' JEM handheld radio, certified by the National Security Agency to protect the confidentiality of voice and data through the Top Secret level.

#### 2008

- Wind River establishes the embedded Linux market share lead with greater than 30 percent of total market revenue, only four years after entering the market.
- Wind River is selected by Northrop Grumman for the U.S. Navy's Unmanned Aerial Combat Systems.
- VxWorks 653 is chosen for the European nEUROn Unmanned Combat Air Vehicle Program.
- Hughes selects Wind River for next-generation automotive electronics.
- Wind River Workbench is awarded Best Commercial Eclipse-Based Developer Tool by the Eclipse Foundation.
- Wind River acquires South Korea—based MIZI Research to strengthen mobile Linux capabilities and Asia-Pacific presence.

# 2009

- Intel acquires Wind River for approximately \$884 million. Wind River becomes a wholly owned subsidiary of Intel and part of its Software and Services Group.
- Wind River launches its commercial Android platform called Wind River Platform for Android.
- Wind River enters the embedded virtualization market by launching a type 1 embedded hypervisor for unicore and multi-core embedded devices.
- Wind River becomes a founding member of the GENIVI Alliance along with BMW Group, Delphi, General Motors Corp., Intel, Magneti Marelli, PSA Peugeot Citroën, and Visteon Corp.
- Wind River acquires Ottawa, Canada-based Tilcon Software to add graphical user interfaces to its ever expanding product portfolio.



# 2010

- Wind River adds Simics to its product portfolio through the acquisition of Virtutech.
- VxWorks becomes the first real-time operating system to be certified under Wurldtech's Achilles certification program, an internationally recognized standard for industrial cyber security.
- Wind River Network Acceleration Platform wins the ATCA Summit Best of Show Award, Best Software Product category.
- Wind River Framework for Automated Software Testing (FAST) for Android wins Editor's Choice in Embedded Computing Design.
- Wind River enables embedded developers to begin application development in less than one hour, versus what traditionally can take days or weeks, with the introduction of the Wind River On-Board Program.
- Leading train manufacturer Bombardier Transportation selects Wind River VxWorks 61508 Platform and Wind River Linux for its latest standards-based HMI410 Train Information System.
- Wind River partners with Intel and the Linux Foundation to create the Yocto Project, an open source project and standard for deeply embedded Linux development.

#### 2011

- Northrop Grumman's X-47B first flight is powered by VxWorks at Edwards Air Force Base in California.
- Wind River Linux Secure is introduced, becoming the first commercial embedded Linux platform to achieve EAL4+ certification.
- Wind River and Magneti Marelli create the first GENIVIcompliant in-vehicle infotainment solution for the automotive industry, initially created for BMW.
- Wind River forms a strategic partnership with McAfee to develop and support comprehensive embedded and mobile security solutions.
- Wind River celebrates its 30th anniversary.

