

### General Description

WinDriver is a driver development toolkit that simplifies the creation of monolithic device drivers. WinDriver includes a graphical development environment, APIs, diagnostic and debug utilities and samples, which enable you to quickly develop a high performance driver, without being a “driver guru”.

### Product Features

- **Immediate hardware access:** Access USB hardware through a graphical user mode application, without having to write a line of code
- **Generation of hardware specific code:** The WinDriver DriverWizard generates your skeletal driver code, customized to your hardware.
- **Easy addition of functionality and logics to the generated skeletal code:** In user mode and within your favorite development environment
- **Graphical tools:** DriverWizard, an intuitive user mode application, simplifies hardware access and driver code generation
- **Debugging:** Graphical Debug Monitor to monitor kernel level activity
- **Multi operating system support:** Supports Windows 98/Me, Windows 2000/XP/Server2003, Windows CE.NET and Linux
- **Cross operating system compatibility:** The developed is source compatible between all supported operating systems without any code modifications
- **Hardware independent:** Supports any USB based hardware

WinDriver is also available for **PCI/CompactPCI/ISA/ CardBus /EISA** based hardware. Refer to [www.jungo.com](http://www.jungo.com) for further details.  
Also from Jungo, **KernelDriver**, for standard device drivers.

### Product Benefits

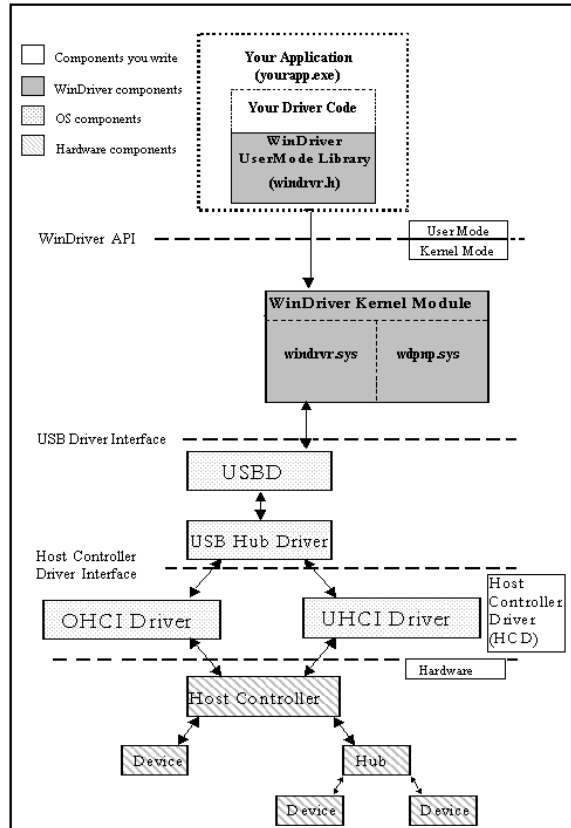
#### **Shorter development cycle; easier learning curve; faster time to market**

- Isolates hardware bugs from driver developer
- No kernel mode programming
- No need to master the operating system internals, the Microsoft DDK or the USB protocol
- Write and support one driver code base
- Includes samples for jump-starting your development
- USB chipset vendors support from Cypress, STMicroelectronics, Texas Instruments, National Semiconductors
- Free, full featured, 30-day evaluation version: The code created with the evaluation version will be ready for commercial distribution upon purchase of a registered product
- Free, expert technical support, for the duration of the evaluation period

### Technical Specifications

- Detection of USB devices, including those residing beyond a USB hub
- Provision of information about each detected device: Physical location; Vendor ID and Product ID; configuration, interface, alternate settings and endpoint data
- Hardware verification and debugging via an intuitive wizard:
  - Transfer of data packets through USB pipes (Read / Write)
  - Continuous Read from pipes (“Listen”)
  - Pipe reset operations
- Windows WDM compliant; support Plug-and-Play and power management notification handling
- Generation and installation of INF files
- Supports low/full/high speed devices
- Supports Control, Bulk, Interrupt and Isochronous data transfers
- Multiple interfaces devices support

## Architecture Diagram



The device driver developed with WinDriver (`yourapp.exe/dll`) accesses hardware through the WinDriver kernel module (`windrvr.sys`) using the standard WinDriver API functions (`windrvr.h`).

## System Requirements

### Operating Systems Supported

- Windows 2000 / XP / Server 2003
- Windows 98 / Me
- Windows CE 2.0 - 4.x (x86 / MIPS / ARM CPU)
- Linux and Embedded Linux 2.0.31-2.4.x
- Windows NT 4.0 supported under previous WinDriver Versions

### Compiler

- Any 32 bit C, Pascal or VB compiler (MSDev Visual C/C++, Visual Basic 6.0, Borland, Delphi etc.)

### Hard drive space

- Windows 98/Me/2000/XP/Server 2003: 34 Mb

### Driver footprint

- 423KB

## Supported Industry Standards

Designed to comply with:

- Universal Serial Bus specification 1.1
- Universal Serial Bus specification 2.0

### About Jungo Ltd.

Founded in 1998, Jungo Software Technologies Inc. is a privately held company with corporate offices in San Jose CA and an R&D center in Israel.

Jungo's hardware access product line, featuring WinDriver, enables developers to quickly create drivers for custom devices that can run on a multitude of operating systems without modification. Jungo's high-availability product line, including GO-HotSwap, provides a complete solution for the CompactPCI high-availability market.