

SNiFF+ PRO 4.1

For TORNADO Teams

EMBEDDED DEVELOPMENT TOOLS



WIND RIVER

Accelerating team-oriented development of industrial-strength VxWORKS® applications

SNiFF+ PRO™ for **TORNADO®** Teams is Wind River's premier solution for developing industrial-strength **VxWORKS** applications in a team environment.

SNiFF+ PRO allows developers to build reliable, embedded applications based on **VxWORKS** faster than any other development environment and RTOS solution.

The award winning **SNiFF+ PRO** development environment consists of a core set of browsing and code analysis tools tightly integrated with **TORNADO's** compiler and debugging tools.

If source code is not well understood and the impact of code changes unclear, developers face much higher costs down the line and end up spending more time and money on probes, debuggers and testing tools. Eventually, developers lose potential product revenue and market share when releasing a product late.

SNiFF+ PRO provides unmatched code browsing and analysis capabilities to jump-start new developments and bring delayed projects back on track.

Develop VxWORKS applications faster

SNiFF+ PRO's browsing and code comprehension features allow novice users to quickly unlock the full power of the **VxWORKS® API**. Studies show that the code analysis features of **SNiFF+ PRO** can accel-

erate the learning curve associated with unfamiliar code by as much as 60%. The **VxWORKS** reference manual is tightly integrated with the swift code browsers, yielding to well-written applications in less time.

Protect software assets

As embedded applications grow in size, developers require scalable and robust development tools with modest resource requirements.

SNiFF+ PRO handles extremely large code bases of over 17 MLOC in size, yet produces fast and reliable results. Projects, workspaces and databases created with **SNiFF+ PRO** can be shared with the entire team, resulting in a very efficient environment. Moreover, **SNiFF+ PRO** supports a large number of programming and scripting languages within a single toolset, giving engineering managers peace of mind for future projects.

Enables improved productivity

Today, developers are often required to maintain applications written by someone else. Fixing unfamiliar code can result in unwanted side effects and introduce new bugs in other parts of the application. Unlike text-oriented tools, **SNiFF+ PRO** recognizes the context of a query and graphically visualizes the potential impact of code changes to eliminate "flying blind." The unique PowerChange feature automates error-prone

Features

- Team-oriented development environment for **VxWORKS®**
- Fast, intuitive browsing and code analysis
- Robust project management and team support
- Multi-platform, mixed-language build system
- Seamless integration with leading CM systems
- C/C++, Assembly, Java, Ada, Corba IDL and Fortran support

Additional Features

- **GNU** and **DIAB™ C/C++** compiler support
- CrossWind/gdb and **SINGLE STEP™** debugger support
- Remote compile/debug feature
- **WIND®VIEW**, ScopeTools and CodeTest support
- Automated documentation generation for C/C++ and Java source code
- ClearCase, CM Synergy, CVS, RCS, Perforce, PVCS and Visual Source Safe support
- Visual SlickEdit, emacs and vi support

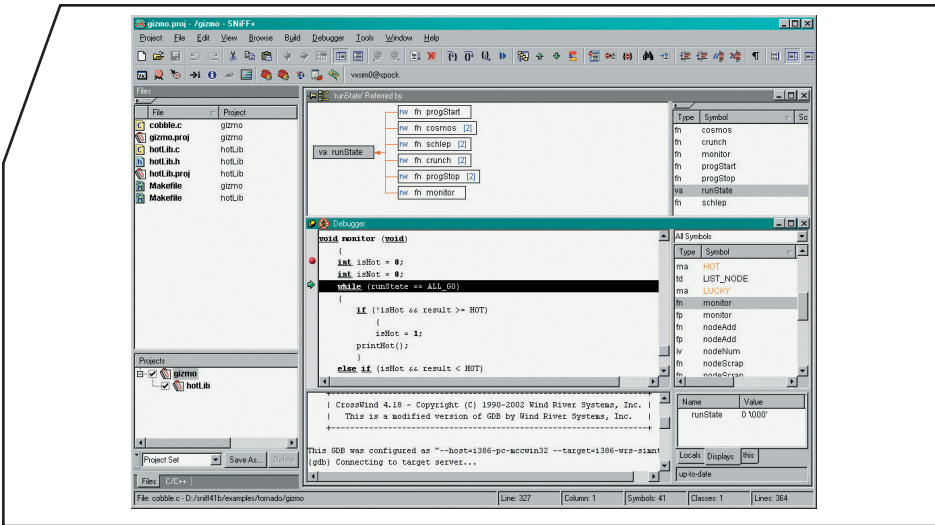
Supported hosts

- Windows NT/2000/XP¹
- Solaris 2.7 or higher¹
- HP-UX 11.0²
- IBM AIX³
- Linux³

¹ **TORNADO® 2.0.x** or higher

² **TORNADO® 2.0.x** and **2.1** only

³ **TORNADO®** tools not available



manual tasks across the entire project. State-of-the-art code-completion and parameter-hinting features make code composition a breeze.

Leverage existing source code

Rather than starting from scratch, most projects begin with an existing code base, creating unique challenges for administrators who need to integrate legacy software with projects created with the Integrated Development Environment (IDE). **SNiFF+ PRO** provides a flexible project system that easily drops into existing directory structures, offering administrators numerous customization options to tweak the project system for optimal results. No matter how large and widespread the code base, with **SNiFF+ PRO** developers achieve maximum leverage of existing or acquired intellectual property combined with new engineering results.

Upgrade the build process

SNiFF+ PRO provides sophisticated, fully automated build support.

Whether object code (with and without debug information) is required to be managed at the same time, multiple tool chains and target platforms need to be supported, or mixed-language applications should be compiled, the **SNiFF+ PRO** build support can handle it all. A remote compile/debug feature allows projects to utilize low-cost development terminals running Windows and Unix-based build servers. Makefiles generated by **SNiFF+ PRO** are stored in plain text format and can be exported for external use.

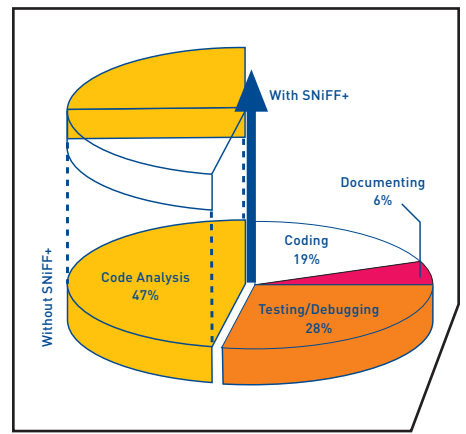
Collaborate better as a team

SNiFF+ PRO goes well beyond the Check In and Check Out functions provided by traditional IDEs. The integration with ClearCase and other CM systems fits perfectly, giving developers full access to the specific features of the underlying CM system. Developers can retrieve up-to-the-minute locking information of files. Branches, configurations, and the change history are displayed in a graphical manner. A

visual DiffMerge tool enables quick synchronization of file revisions. Workspaces created in **SNiFF+ PRO** allow developers to check out shared code for local builds, efficiently shielding the baseline from accidental modifications.

Solve difficult problems more quickly

SNiFF+ PRO creates a positive problem-solving experience by integrating static analysis tools like symbol browsers and cross referencing tools that work at the source code level with dynamic analysis tools such as debuggers and profilers working at runtime. Developers can effortlessly look up macros, functions, and variable definitions, and see which other functions modify them. All of this can be done while debugging the application, providing a much broader understanding of the inner workings of the code. As a result, hours of cumbersome problem solving and bug fixing tasks can now be accomplished in minutes.



Source: "Software Quality: Producing Practical, Consistent Software" Mordecai Ben-Menachem & Garry S. Marliss, Thomson Computer Press, 1997.



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