PTC ObjectAda® for Linux

## LEVERAGE THE ADVANTAGES OF THE LINUX-BASED OPEN-SOURCE DEVELOPMENT PLATFORM

PTC ObjectAda for Linux® is a complete enterprise-class Ada software development solution for the deployment of Ada applications on popular Linux-based platforms. It combines blazing-fast compilation speed with efficient edit and debug tools that engineers require for development of mission-critical applications.

Today's systems, even those deploying legacy applications, continue to evolve and improve with faster execution and more memory. Increasingly mission-critical applications are deployed on Linux-based platforms to leverage the advantages of open-source components, as well as the lower cost and higher performance of Linux/Intel platforms. PTC ObjectAda for Linux is a complete Ada software development solution for deployment of Ada applications on the Linux/Intel platforms. It combines blazing-fast compilation speed with efficient edit and debug tools that engineers require for development of mission-critical applications.

Key features

- ObjectAda for Linux: 32-bit support for x86-based Linux native applications.

- ObjectAda64 for Linux: 64-bit support for x86_64-based Linux native applications.

- Ada95, Ada 2005, and Ada 2012 language edition support.

- Features which facilitate porting existing Ada source code to 64-bit.

- Efficient, reliable, and optimizing compiler technology provides complete, well-rounded development environment.

- Comprehensive reference documentation to assist in development process.

- Includes an optimizing compiler, library manager, runtime, debugger, and configuration management integrations.

- Eclipse-based graphical user interface for building projects with the ObjectAda tools provides a productivity toolset that include an editor, a browser, and graphical interface to the ObjectAda debugger.

- Easy-to-use environment.
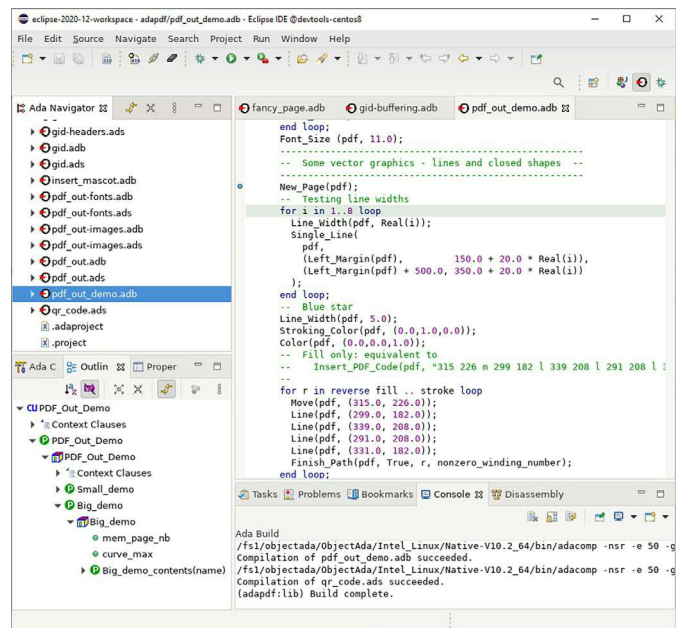
PTC ObjectAda Eclipse-based development environment.

Capabilities and specifications

- **Powerful Eclipse-based IDE:** ObjectAda plug-ins for Eclipse incorporate Ada-project awareness, an Ada-language sensitive editor, Ada-language compile and build capabilities, and a complete Ada debugger interface, enabling Ada developers to enjoy state-of-the-art interface capabilities geared to maximize developer ease and efficiency. Allows for leveraging built-in support within Eclipse to integrate with configuration management systems such as Git.
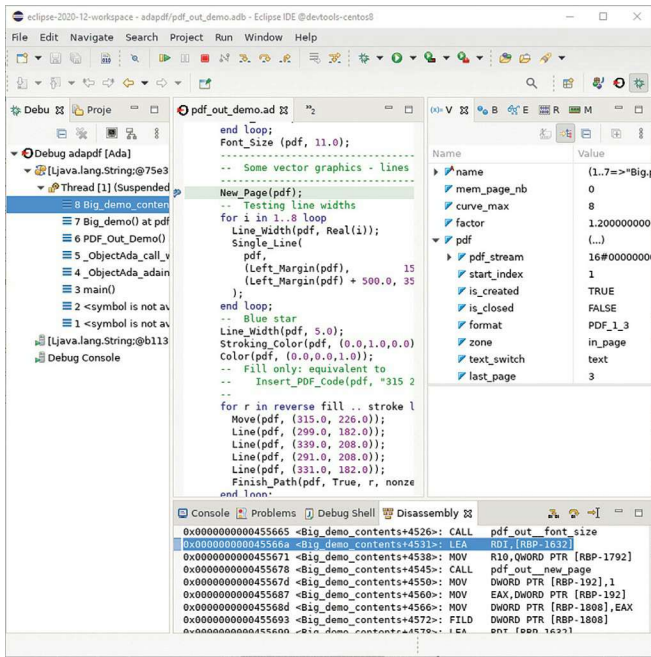
Using PTC ObjectAda Eclipse IDE Ada debugger

- **Lightning-fast optimizing compiler:** State-of-the-art analytical engine optimizes compiler performance and object code generation.

- **Fast, open library model:** Source files are mapped one-for-one with object files which can be intermixed with object files from any other language. Simple ASCII text files are used to maintain basic build information and dependency information.

- **Visual Ada source browser:** An integrated source browser that supports navigation from an identifier to its declaration or references and visualization of relationships between objects is included.

- **Integrated Ada reference manual:** Hypertext versions of the Ada Language Reference Manual (LRM) and Ada Rationale make it easy to browse the full scope and breadth of the Ada language and to understand the reasoning behind its design. Compile-time errors are cross-referenced into the LRM.

- **AdaPOSIX:** Ada binding to standard POSIX APIs compliant with IEE POSIX 1003.5 specification.

- **AdaNav analysis toolset:** Provides HTML source-navigation capabilities, as well as call tree and unit tree graphical reporting and automatic data dictionary generation. The AdaNav profiler provides run-time performance reporting to help identify application hot spots and improve program performance.

- **ASIS support:** The Ada Semantic Interface Specification (ASIS) support in PTC ObjectAda provides a standard way for tools to extract semantic data that is best collected by an Ada compiler.

- **Ada 2012 Annex G Numerics support:** Complete implementation of Ada 2012 Numerics annex provides features for complex arithmetic, including complex I/O, features for the manipulation of real and complex vectors and matrices.

Platform support and system requirements

- Support for Red Hat Enterprise Linux V7.6 and later (and equivalent Linux distributions).

- Eclipse SDK 2020-09 (4.17) or greater (64-bit, requires Java 11 / OpenJDK 11 64-bit support).

For more information, visit: https://www.ptc.com/products/developer-tools/objectada

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