



ptc objectada[®] for Windows
ptc objectada[®] 64 for Windows
Version 10.0 Release Announcement

New native Ada compiler release implements Ada 2012 language features and supports Microsoft Visual Studio 2017 and Windows 10 Software Development Kit (SDK)

Needham, MA – June 8, 2018 — PTC (NASDAQ: PTC) today announced the release of version 10.0 of its popular PTC[®] ObjectAda for Windows and PTC ObjectAda64 for Windows Ada compiler products. This new release introduces support for a substantial initial subset of Ada 2012 language features and support for development of native Windows 32-bit or 64-bit applications using the Microsoft Visual Studio 2017 development tools and libraries from the Windows 10 Software Development Kit (SDK). The Ada 2012 features implemented in this release include the dynamic contracts (preconditions and postconditions for subprograms), aspect specifications, new flexible forms of expressions, and new predefined program library packages. In addition, with this new release, ObjectAda can be configured to use any installation of the Visual Studio 2017 tools and Windows 10 Software Development Kit (SDK), thereby enabling development using the latest releases from Microsoft[®].

ObjectAda version 10.0 is a major new release incorporating these enhancements:

- Compiler, runtime, debugger, and IDE upgrades
- New Ada 2012 language support
- Ada 95, Ada 2005, and Ada 2012 compiler operation modes
- Windows 10 compatibility, also works with Windows 7 or later
- Ada bindings to Windows APIs based on Windows 10 SDK
- Development using Visual C++ 2017 tools & Windows 10 SDK libraries
- Ada Development Toolkit (ADT) Eclipse interface upgrade – works with latest Eclipse versions

“ObjectAda for Windows v.10.0 is the first in a series of releases PTC has planned in its phased implementation strategy for Ada 2012 language feature support.” stated Shawn Fanning, Software Development Director at PTC. “With this major new release are we enabling ObjectAda customers with the power of the Ada 2012 contract-based programming constructs and the option to employ the latest versions of Microsoft development tools and technologies in combination with ObjectAda. We are confident that our existing and new customers will find this to be a powerful combination of advancements and we are happy to say that there are more advancements to come in the releases to follow.”

About the PTC ObjectAda Family of Products

PTC ObjectAda is an extensive family of native and cross development tools and runtime environments. PTC ObjectAda native products provide host development and execution support for the most popular environments including Windows, Linux and various UNIX operating systems. PTC ObjectAda Real-Time products provide cross development tools on Windows, Linux or UNIX systems which target PowerPC and Intel target processors in support of “bare” hardware execution or in conjunction with popular RTOSs. PTC ObjectAda Raven products provide a hard



real-time Ada runtime to address those systems requiring small footprint, deterministic behavior, or certification to safety standards.

Shipping and Availability

PTC ObjectAda v10.0 and PTC ObjectAda64 v10.0 are immediately available. License pricing is available on request.

Key Features

- ❖ ObjectAda for Windows: 32-bit support for x86-based Windows platforms
- ❖ ObjectAda64 for Windows: 64-bit support for x86_64-based Windows platforms
- New!** ❖ Windows 10 compatibility
- New!** ❖ Visual C++ 2017 tools & Windows 10 SDK libraries
- New!** ❖ Ada Development Toolkit (ADT) Eclipse interface - Works with latest Eclipse versions
- New!** ❖ Regenerated Windows API Ada language bindings
- ❖ Compiler options to facilitate porting existing Ada source code to 64-bit
- New!** ❖ Ada95, Ada 2005, and Ada 2012 operation modes
- ❖ Efficient, reliable, and optimizing compiler technology provides complete, well-rounded development environment
- ❖ Provides robust tools and comprehensive reference documentation to assist in development process
- ❖ Easy-to-use environment

Capabilities and specifications

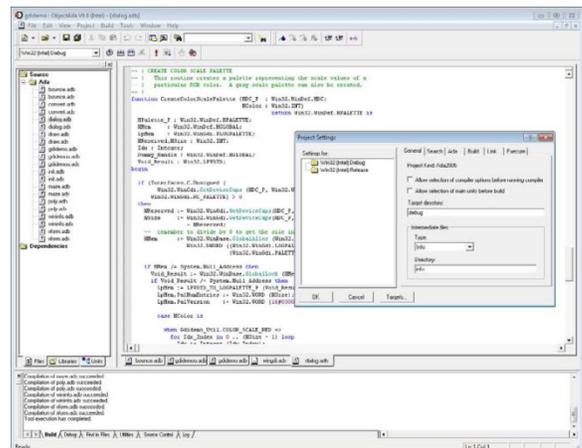
PTC ObjectAda for Windows is one of the most popular Ada environments of all time, providing a large array of specialty tools to meet the expectations of serious engineers working on large-scale projects and the most demanding mission-critical applications.

PTC ObjectAda for Windows is a complete Ada software development solution for deployment of Ada applications on the Microsoft® Windows platform. It combines blazing-fast compilation speed with efficient edit and debug tools that engineers require for development of mission-critical applications.

Flexible, integrated development environment:

PTC's Ada products allow your organization to choose between the traditional PTC IDE and the PTC ADT

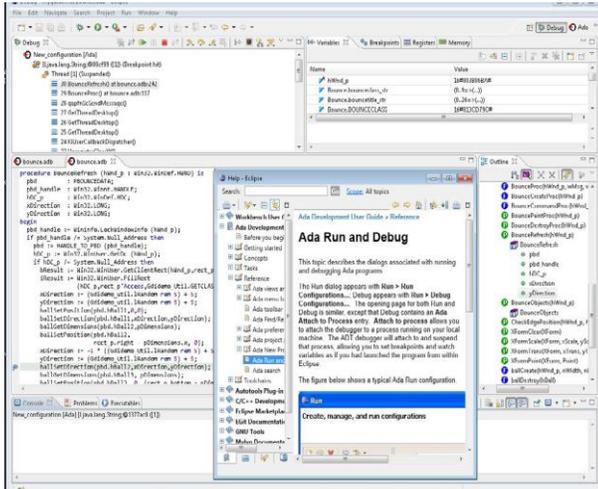
plug-in for Eclipse, enabling integration of all your organizational tool chains to operate in a common Eclipse-based environment. PTC ADT incorporates Ada project awareness and Ada language-sensitive editor, Ada language compile and build capabilities, and a complete Ada debugger interface, all in an environment geared to maximize developer ease and efficiency.



PTC ObjectAda Windows-based IDE



Optionally, developers may choose to use the PTC Windows-based IDE modeled after Microsoft's time-tested Visual C++ product, one of the most widely used IDEs on the market. This intuitive graphical environment ensures a short learning curve and extreme flexibility.



PTC ObjectAda Eclipse-based Development

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.

DLL import and export:

Easy-to-use mechanisms are provided for creating Dynamic Link Libraries (DLLs) for use by other applications and existing DLLs.

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.

Windows API Ada language bindings:

Windows programmers can choose between the de-facto standard Win32 Ada bindings (Win32Ada), and the WinAPI evolvable binding set designed to keep up with the latest Microsoft API releases.

Codeview debugger support:

Codeview-compatible debuggers (e.g., Microsoft Visual C++®) are supported enabling the debug of Ada and multilingual applications.

AdaNav analysis toolset:

AdaNav provides complete system 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 you 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.

For more information about the PTC ObjectAda family of products, visit:

<http://www.ptc.com/developer-tools/objectada>

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