

PTC ObjectAda for Windows Version 10.1 is now Shipping!

New native Ada compiler release implements additional Ada 2012 language features

Boston, MA – May 27, 2019 -- PTC (NASDAQ: PTC) today announced the release of version 10.1 of its popular PTC® ObjectAda for Windows and PTC ObjectAda64 for Windows Ada compiler products. This new release expands the support for Ada 2012 language features to include the complete set of Ada 2012 container packages and support for the associated Ada 2012 language constructs required by those packages. Support for dynamic contracts (preconditions and postconditions for subprograms), aspect specifications, new flexible forms of expressions has also been enhanced in this new release. ObjectAda for Windows and ObjectAda64 for Windows support development of native Windows 32-bit or 64-bit applications using the Microsoft Visual Studio 2017 / 2019 development tools and libraries from the Windows 10 Software Development Kit (SDK).

ObjectAda version 10.x is a major upgrade from previous versions 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 / 2019 tools & Windows 10 SDK libraries
- Ada Development Toolkit (ADT) Eclipse interface upgrade – works with latest (32-bit) Eclipse versions

“PTC has pursued a phased implementation strategy for Ada 2012 language feature support in ObjectAda, and our new ObjectAda for Windows version 10.1 release represents a substantial step forward toward providing complete support for Ada 2012 features”, stated Shawn Fanning, Software Development Director at PTC.

“ObjectAda version 10.1 supports runtime assertion checks for conditions expressed on class-wide types, provides full support for the Ada 2012 extensions to the predefined container packages, and provides all of the Ada 2012 language features required by those packages. Additionally, the new installation approach introduced with ObjectAda for Windows v10.x allows ObjectAda to be used with the latest releases of Microsoft’s Visual Studio tools and the Windows 10 SDK, including the recently released Visual Studio 2019.”

About PTC’s 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 v10.1 and PTC ObjectAda64 v10.1 are immediately available. License pricing for new customers is available on request. Please visit <https://www.ptc.com/products/developer-tools/objectada>.

Product Download

Existing customers can download the latest version and product documentation from the PTC Developer Tools download portal. Product use will require an updated license key. A license key request form can be found at the download portal.

Product download locations:

1. For PTC ObjectAda for Windows v10.1 (32-bit product): <https://developer-tools-us.ptc.com/Downloads/Products/ObjectAda/Releases/1000/10.1/>
2. For PTC ObjectAda64 for Windows v10.1 (64-bit product): <https://developer-tools-us.ptc.com/Downloads/Products/ObjectAda/Releases/2000/10.1/>

PTC ObjectAda® for Windows®

Combine blazing-fast compilation speed with efficient edit and debug tools

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

Today's systems, even those deploying legacy applications, continue to evolve and improve with faster execution and more memory. Ada applications, by nature, are often intensive and complex code bases that are growing to consume the increased capacity of the systems that host them. And, they are being created, evolved, and maintained by teams of developers needing engineering-quality tools. As a result, the efficiency of development tools has become a very significant differentiator to cost and time to delivery. 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.

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
- Windows 10 compatibility
- Visual C++ 2017 tools & Windows 10 SDK libraries
- Ada Development Toolkit (ADT) Eclipse interface - Works with latest Eclipse versions

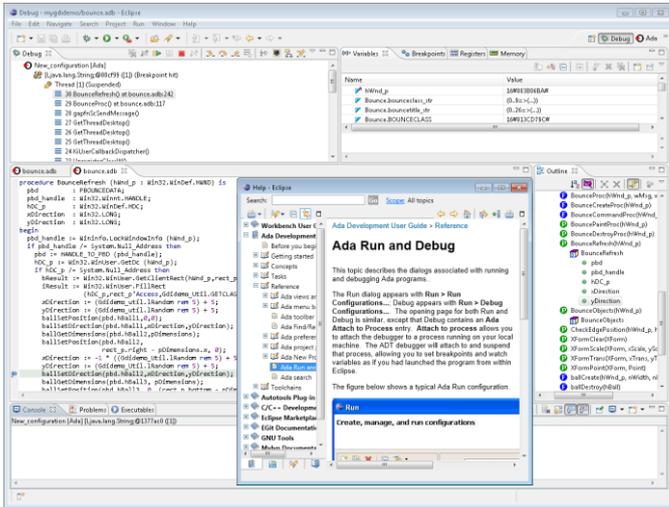
- Windows API Ada language bindings
- Compiler options to facilitate porting existing Ada source code to 64-bit
- Ada95, Ada 2005, and Ada 2012 modes
- Efficient, reliable, and optimizing compiler technology provides complete, well-rounded development environment
- Provides robust tools and comprehensive 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.

ObjectAda for Windows is a complete 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

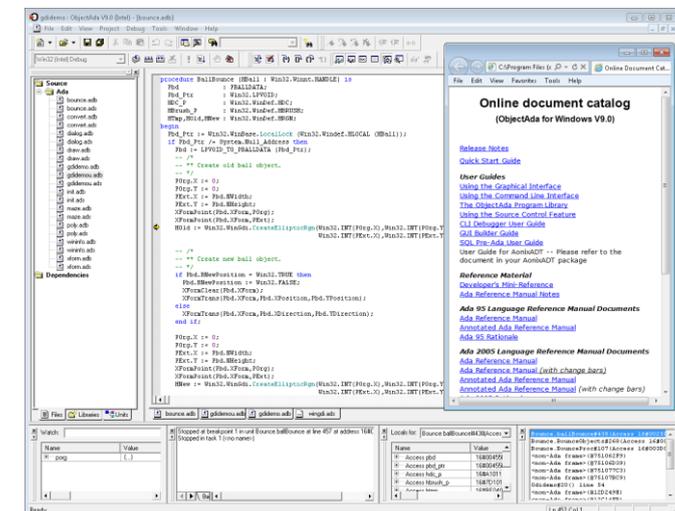


PTC ObjectAda Eclipse-based development environment.

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.

Optionally, developers may choose to use the PTC Windows-based IDE



PTC ObjectAda 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.

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 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 Win32Ada 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 Ada and multilingual applications

- **AdaNav analysis toolset†**: 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 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

†Optional Features

For more information, visit:

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

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