

These release notes contain a summary of new features and enhancements, late-breaking product issues, migration from earlier releases, and bug fixes.

PLEASE NOTE: The version of this document in the product distribution is a snapshot at the time the product distribution was created. Additional information may be added after that time because of issues found during distribution testing or after the product is released. To be sure you have the most up-to-date information, see the version of this document on the Rogue Wave web site:

<https://docs.roguewave.com/en/codedynamics/current/>

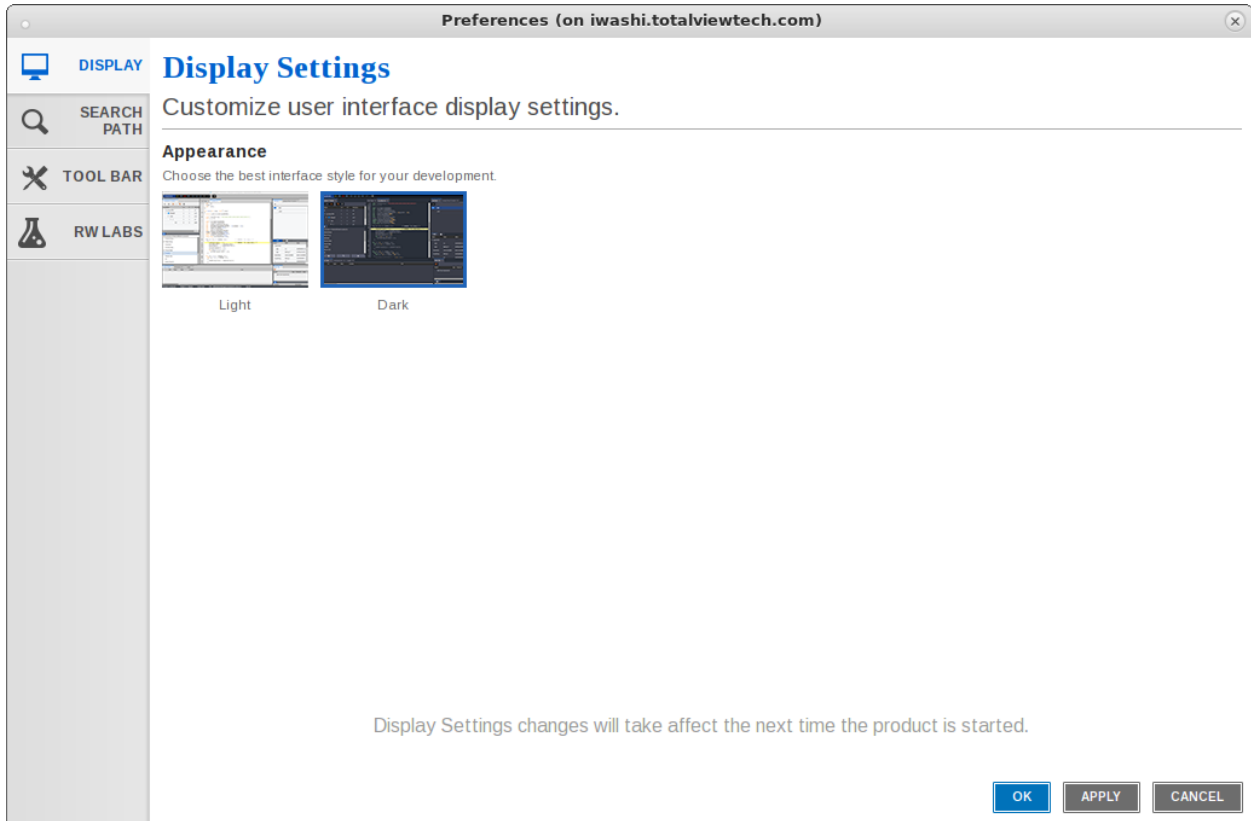
Additions and Updates

Embedded/Edge Debugging Support for NVIDIA® Jetson AGX Xavier™

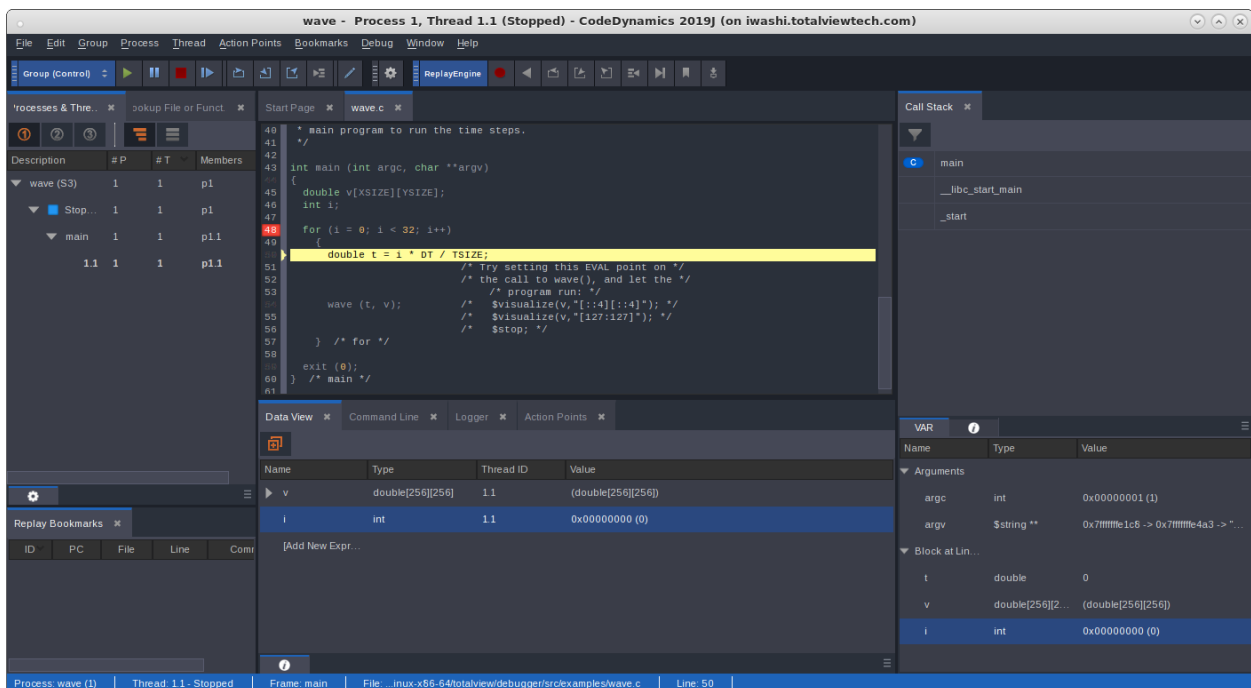
The [NVIDIA® Jetson AGX Xavier™](#) platform offers amazing compute capabilities at the fraction of the size and cost of a workstation making it a perfect fit for a variety of autonomous machine applications. With the 2019.1 release, developers can use the full power of CodeDynamics to debug their CUDA based autonomous machine applications running on the Xavier's ARM 64-bit CPU and 512-Core Volta GPU architecture including using CodeDynamics's memory debugging technologies to find memory leaks and other memory problems in your code.

CodeDynamics Dark Theme

CodeDynamics' user interface was built from the start to support multiple themes and for the 2019.1 release a dark theme is now available! To enable the dark theme simply select the Dark icon from the Display tab on the Preferences dialog, click OK and then restart CodeDynamics.



When CodeDynamics restarts the user interface will be transformed into the new dark theme!



Python 3 Support

For the 2019.1 release, CodeDynamics' ability to debug mixed language Python and C/C++ applications has been enhanced to support Python 3.5 and above. Testing has been done on a variety of OS Python distributions as well as the Enthought Python distribution. The Anaconda Python distribution is not supported due to the unavailability of debug information with the distribution.

Standard Input Debugging Support

Support has been added to allow users to debug programs that require input to be entered at the console while the application is running.

Stability Improvements and Platform Updates

For the 2019.1 release, CodeDynamics has also added operating system support for SuSE/SLES 15 and the PGI 18.10 compiler. Numerous user reported bug fixes have also been fixed in this release.

Platform Updates

CodeDynamics 2019.1 introduces support for the following platforms:

OS:

- SuSE/SLES 15

Compiler:

- PGI 18.10

Bug Fixes for 2019.1

- TVT-22221 C++11 template scopes with lambda function arguments cause "Invalid compilation scope" when diving
- TVT-26711 UI needs to handle programs using stdin
- TVT-27309 User request to modify foreground and background coloring/dark theme support
- TVT-27426 Incorrect breakpoint load behavior with multiple addresses
- TVT-27555 Enable Clang/LLVM TTFs on Linux as they are for macOS

Deprecation Notices

Intel Xeon Phi Offload Coprocessors

Starting with release 2020, CodeDynamics will no longer support the Intel Xeon Phi offload coprocessors.

Known Issues

Python Debugging

Anaconda

CodeDynamics supports debugging of the python interpreter in release 4 of Anaconda but is not working with the recent release of Anaconda 5. Debugging python with GDB also does not work. Something in the way they build the python interpreter has broken the ability to debug python.

Ubuntu 16.04

When debugging python on Ubuntu 16.04 CodeDynamics is not detecting the python interpreter automatically and does not turn on python filtering. Filtering can be turned on by clicking the “filter” icon in the toolbar of the Call Stack view.

macOS

Mojave not yet supported

Attempts to run CodeDynamics on the new macOS Mojave result in a message indicating the Mach system call `task_for_pid()` is not working correctly. This is a permissions issue which is being investigated. Invoking CodeDynamics with `sudo` privilege could be a possible workaround.

Physical console access needed when running CodeDynamics on macOS High Sierra

Due to new security changes in macOS High Sierra, CodeDynamics will only run from the console and cannot be run through a remote desktop technology such as VNC. We are still assessing what changes need to be made to CodeDynamics so that it will run remotely on macOS High Sierra systems.

Linux

Intel 17 and 18 compilers not generating debug information for a declared integer

The Intel 17 and 18 version compilers are not generating proper debug information for declared integers in Fortran applications. As a result, CodeDynamics is not able to properly evaluate the variable expression and display the variable values. This is a compiler bug but a workaround is available by simply adding the `-debug` extended compilation flag option which adds symbols for local scalar variables and parameters.