IntervalZero

Product Release Notice

RTX64 3.5

General Availability Release Date

October 19, 2018

Product Overview

RTX64 3.5 is the latest 64-bit version of IntervalZero's market-leading hard real-time software products. This release provides a number of new features, usability improvements and resolved issues. Once it has been released RTX64 3.5 can be downloaded from here.

New Feature Highlights

RTX64 3.5 contains a number of key new features described below. To see a full list of all new features, and a detailed list of issues resolved, please refer to the product release notes.

- Supports Windows 10 Secure Boot feature.
- Adds support for Windows SDKs newer than version 8.1 and Visual studio 2017 Update 8.
- Offers Advanced options to help optimize a system for performance and memory resource needs:
    - Expands control over Intel Resource Director Technology (RDT) resource allocation capabilities, including Cache Allocation Technology (CAT) and Memory Bandwidth Allocation (MBA) configurations.
    - Adds a RDTPerformance Sample, which provides an example of how to use RTX64-supported Intel Resource Director Technology (RDT) to optimize the performance of particular RTSS threads with high performance requirements.
    - Provides the ability to override Energy/Performance bias on Windows, along with a range for configuring performance vs. energy savings in RTX64.

- Provides RTSS per-process, -thread, and -processor level CPU usage information in the RTX64 Task Manager and through RTAPI calls, allowing developers greater insight into how to optimize and load balance their applications.
- RTX64 Task Manager is enhanced to include a status (Running, Under Debug, Suspended, and Frozen) along with the Ideal processor for all listed RTSS processes.
- Improves Watchdog timer functionality to better determine a starvation timeout on a dedicated RTSS core, so the timeout is correctly reset on a context switch, not the processor idle thread. Also provides the ability to allow for specific core timeouts to be manually reset through an RTAPI call.
- Adds support for C++ magic static local variables and implicit Thread-Local Storage (TLS), which supports initialization and finalization of variables declared with storage class thread_local and __declspec(thread).
- Adds support for C Runtime functions *assert* and *abort* under Debug mode that cause assertions when invalid parameters are passed. Assertion checks that fail through secure functions will throw an exception and display a message through the RTX64 Server console.

Activation & Licensing

The IntervalZero product licensing system allows for flexibility in how features are activated and deployed. Please click here for an overview of IntervalZero product licensing.

For additional information on deployment, please refer to the *RTX64 Deployment Guide*.

Availability

RTX64 3.5 is available beginning October 19, 2018 through Partners and by contacting Sales: sales@intervalzero.com or (781) 996-4481.

We look forward to any comments and feedback. If you have any recommendations, or wish to suggest any product enhancements, please contact Product Management at: productmanagement@intervalzero.com.