

## Product Release Notice

### RTX64 3.4

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#### General Availability Release Date

April 27, 2018

#### Product Overview

RTX64 3.4 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. RTX64 3.4 will be downloadable from [here](#).

#### Key Features

RTX64 3.4 includes new functionality, see the product Release Notes for a full list of new features.

#### General

- Product Help for RTX64 is now available in HTML5 format, replacing the CHM format previously installed. This new format provides a more contemporary look-and-feel, as well as improved search functionality.

#### Activation and Configuration

- The Activation and Configuration utility has been completely redesigned. You can now:
  - activate and manage licenses for RTX64 components and set the RTSS boot configuration from a single screen. (5848)
  - enable and disable licenses through the Activation and Configuration utility. (6258)
  - delete licenses from a license file on a hard drive and dongle. (5636)

## Subsystem

- Adds support for Intel Advanced Vector Extensions 512 (AVX-512) instructions.

## Tools and Utilities

- Adds a System Tray application for RTX64 that displays the current state of the Subsystem and provides links to various RTX64 tools from a right-click menu.
- Improves Task Manager to allow for tasks to be scheduled to start automatically with the Subsystem. (1011)

## SDK Headers and Libraries

- Adds the RTX64 Native Framework a native C/C++ DLL and import library that allows users to programmatically configure the Subsystem from a windows application.
- Adds support for the function, RtMonitorControl, in a Windows applications linked to RTAPI. (5850)
- Adds a new real-time function, RtGetProcessorInfo, that retrieves the number values for the lowest and highest RTSS processors. (3178)

## Samples

- Adds a new sample, MulticoreResponseTimeMeasurements, that runs timers on different cores simultaneously and collects measures for the system response. (4427)
- Adds a new sample, Native Framework Client, that demonstrates how to use the RTX64 Native Framework library in a Visual Studio C/C++ project. (6002)
- Adds a new sample, RawIpSocket, which runs a raw IP echo client and/or raw IP echo server, depending on the specified command line options. (2687)
- Improves the TCPIP sample to demonstrate how to use non-blocking connects. (4938)

## Issues Resolved

RTX64 3.4 includes resolutions for a number of previously reported issues. See the product Release Notes for a full list of resolved issues.

## Activation and Configuration

- Resolves an issue regarding RTX64 providing warning for evaluation license expiry when the license was not the current license in use. (6257)
- Resolves an issue regarding RTX64 reporting it was not licensed following a downgrade of the Runtime product license. (5225)
- Resolves an issue regarding the error *No RTX64 runtime license is available (Error:0x20000001)* randomly occurred when an RTSS application was run on a system where the RTX64 license file contained several licenses locked to different dongles. (6333)
- Resolves an issue regarding the RTX64 Activation command line utility hanging when multiple NICs were connected to the machine and the `Rtx64ActivationUtil.exe - listdongles` command line option was used. (5621)

## Subsystem

- Resolves an issue regarding calling the function `RtkOpenMutex` with a name that does not exist in the RTX64 namespace. (5859)

## Tools and Utilities

- Resolves an issue regarding `RtssRun` returning a Process ID rather than a proper exit code. (5000)
- Improves the following tools to include a stack trace in the error messages that appear when an unhandled exception occurs: (4962)
  - o Task Manager
  - o Monitor Utility
  - o Dongle Activation Utility
  - o Activation and Configuration Utility
  - o Latency View
- Improves RTX64 integration with the Windows Event Viewer so that logged RTX64 events now contain complete event details in human-readable form. (3464)
- Improves RTX64 by ensuring notifications appear for all user login sessions. (2726)
- Ensures Analyzer includes multiple IPv4 Address and Netmask pairings when such pairings exist for a single physical interface. (5937)
- Resolves an issue regarding Analyzer not always including the label Visual Studio 15.0 in its output when Visual Studio 2017 was installed. (5748)

- Resolves an issue regarding Tracealyzer failing silently on machines where the RTX64 SDK was installed but not the Runtime. (6238)
- Resolves an issue regarding Task Manager not retaining parameters specified for a given task. (4416)
- Resolves an issue regarding Analyzer sometimes incorrectly reporting the Windows Operating System version. (5692)
- Resolves an issue regarding an exception occurring when Task Manager attempts to retrieve process information for elevated Windows processes linked to RTX64. (6810)

## RT-TCP/IP Stack and Drivers

- Resolves an issue regarding the RT-TCP/IP Stack reporting errors when run on a machine with over 32 processors dedicated to Windows. (5920)

## SDK Headers and Libraries

- Resolves an issue regarding some applications generating the following compiler error when built in Japanese versions of Visual Studio: *The file contains a character that cannot be represented in the current code page (number)*. (5720)
- Resolves an issue regarding C Runtime function fflush returning an error when used in the RTSS environment. (6671)

## Samples

- Resolves an issue regarding the SRTM, RtTcpIpServer, and RtTcpIpClient samples each generating build errors in Visual Studio 2017 if the *Microsoft Foundation Classes (MFC) for C++* package was not included in the Visual Studio 2017 installation. (5858)
- Resolves build warnings that occurred when the IPCLatency sample was built in Visual Studio 2017. (5769)

## Installation

- Resolves an issue regarding the RTX64 SDK not adding the path `C:\Program Files\IntervalZero\Common\bin` to the PATH variable. As a result, a full path was required when activating via Command Line when only the SDK was installed. (6162)

- Resolves an issue regarding the history information used by Analyzer not being updated when the ADDLOCAL and/or REMOVE parameters were specified during modification of a silent installation. (6158)
- Resolves an issue regarding the RTX64 Runtime installer failing when attempting to upgrade an existing version on a machine where LPT or COM Port devices were converted to RTX64 control. (6233)
- Resolves an issue regarding a Blue Screen occurring during installation on machines with the Intel RAID controller when any laStor\_.sys driver was present in the `C:\windows\system32\drivers` folder. (6363)

## 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 3.4 is available beginning April 27, 2018 through Partners and by contacting Sales: [sales@intervalzero.com](mailto: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](mailto:productmanagement@intervalzero.com).