

Visualizing RTOS scheduling and event tracing with RapiTask

RapiTask

Locating rare timing events, such as race conditions, and other debugging tasks

RapiTask allows you to search large traces for specific situations, quickly locate specific patterns within a trace, and to identify patterns visually.

Take advantage of a new tracing solution

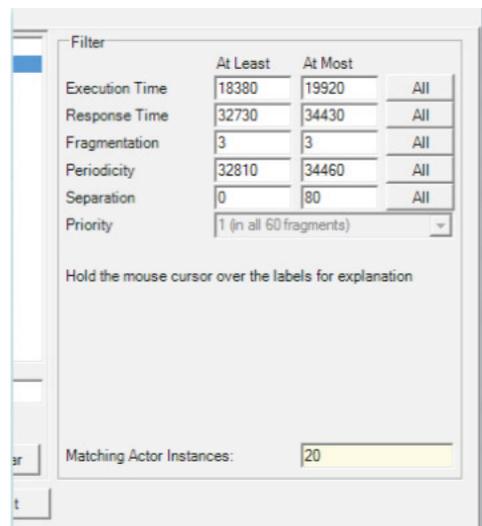
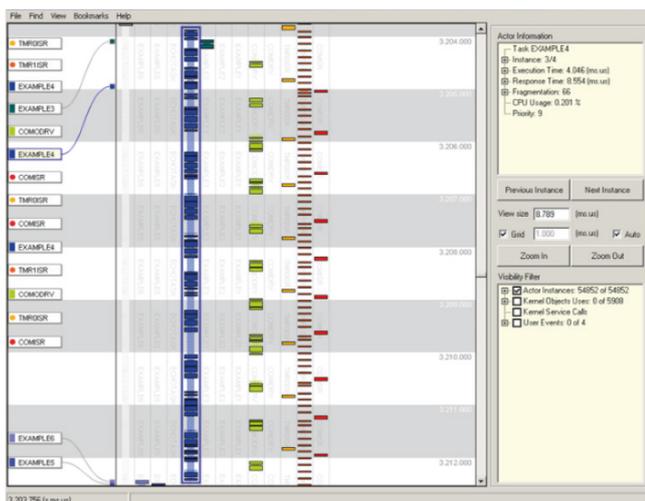
If you work with embedded systems with complex scheduling (for example, multi-threaded or multi-core), you will know that debugging and verifying them can be challenging.

RapiTask provides an RTOS-independent tool for visualizing and exploring the scheduling behavior of such systems, and rapidly diagnosing and identifying potential problems.

How can RapiTask help you?

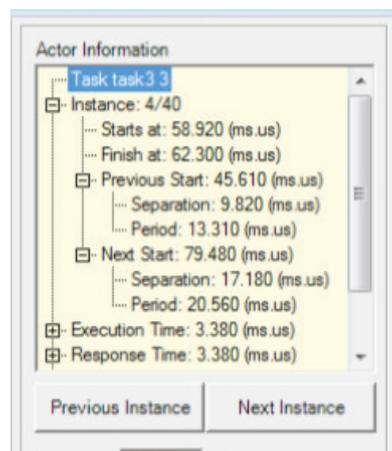
Getting a high-level overview of system scheduling

RapiTask provides the ability to visualize scheduling behavior across threads and processor cores, and report response times.



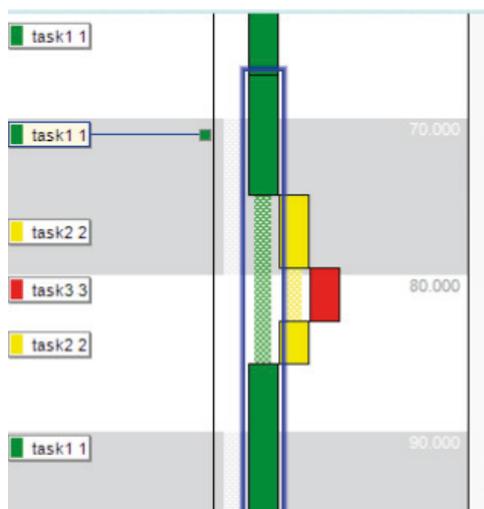
Understanding system capacity issues

RapiTask shows peak CPU utilization, average CPU utilization, and fragmentation (the number of pre-emptions/interrupts). These statistics are summarized in a report.



Supporting different targets, including multicore

RapiTask is target-independent and can be easily adapted to work with different targets.



Verifying actual timing behavior

Allowing you to confirm timing behavior meets system requirements, RapiTask provides the ability to measure system-level properties such as periodicity and jitter.

Quickly identifying user-specific concerns/user-level events

RapiTask provides customizable colouring of tasks and supports visualization of OS-level features such as alarms, events, mailboxes, mutexes etc.

Deployment and integration

If you are already using RapiTime, RapiTask can use your existing integration. If not, we offer a Target Integration Service to get you up-and-running.

Specially designed for customers who require guidance to integrate RapiTask with their development environment, the Target Integration Service provides a specific consultancy package which results in:

- documentation describing how the integration works with the customer's development environment;
- source code of instrumentation libraries; and
- build scripts.

The result is a Target Integration Kit (TIK) which guides your engineers, saves valuable resources and enables a smooth and customized integration into your development environment.

The benefits of our tracing solution

RapiTask:

- Offers significantly faster debugging of timing problems
- Is not tied to a specific RTOS vendor
- Provides customizable coloring of tasks
- Visualizes large traces quickly
- Reduces debugging and verification effort
- Is easily integrated with RVS, offering a wider range of capabilities such as worst-case execution time analysis.



Atlas House
Osbalwick Link Road
York
YO10 3JB
United Kingdom

Email: enquiries@rapitasystems.com
Website: www.rapitasystems.com

Registered in England & Wales: 5011090

Tel (UK/International): +44 (0)1904 413945
Tel (US): +1 248-957-9801