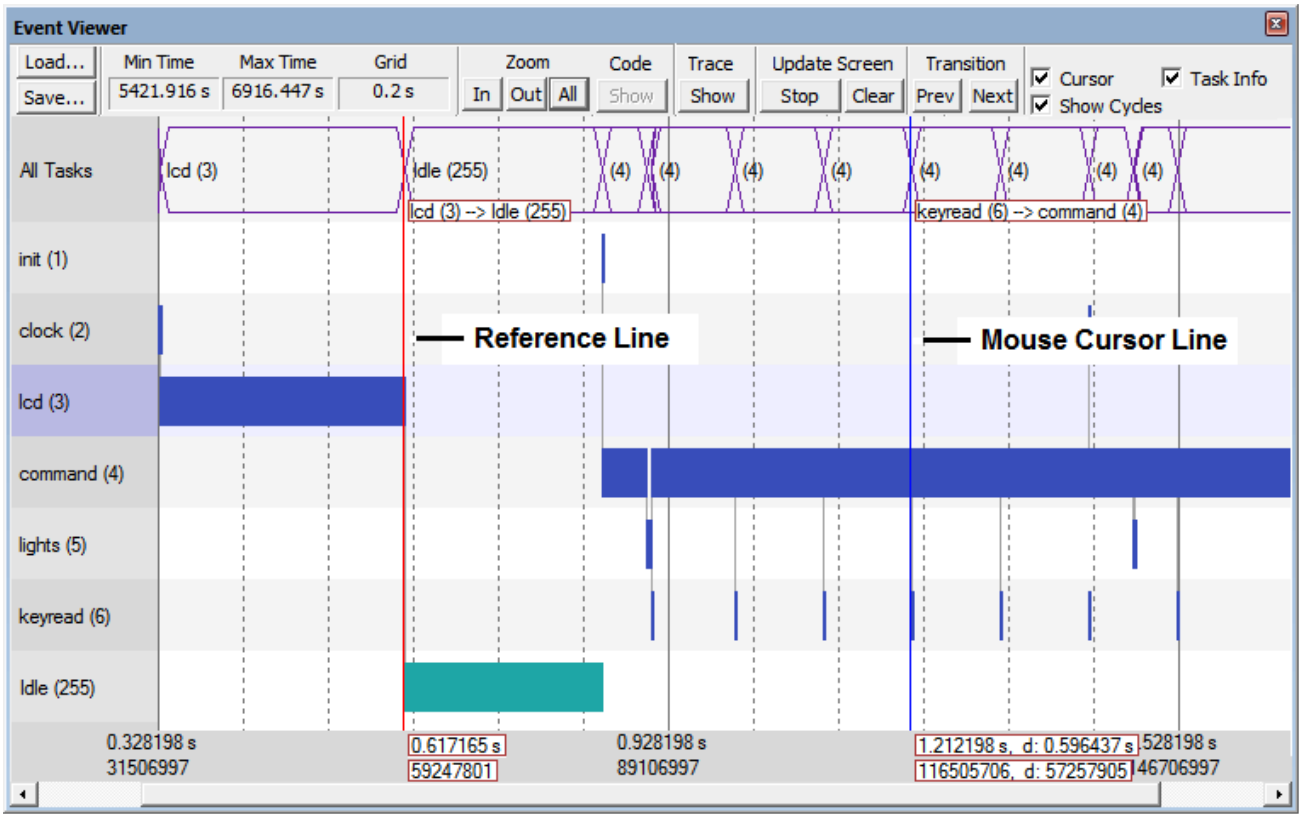
Event Viewer

The **Event Viewer** is a graphical interface showing tasks and task-switching events on a time scale. Task names and IDs are displayed on the left side of the window. The time scale is displayed on the bottom border of the window.

Open the window with the menu **Debug - OS Support - Event Viewer**.



Where

Load... imports the tasks and task-switching history previously saved in a file (*.UVTSK). Data can be analyzed off-line.

Save... stores the tasks and task-switching history in a file (*.UVTSK) for future analysis.

The time fields show:

- **Min Time** is the first timestamp of the task recording buffer. The time starts at zero and keeps rolling forward while µVision records the tasks.
- **Max Time** is the last timestamp of the task recording buffer. It shows the time past since signal recording started.
- **Grid** is the time interval between two grid lines.

Zoom buttons change the time scale:

- **In** zooms into the tasks to get a detailed view at the **Reference Line**. The time interval between two grid lines gets smaller.
- **Out** zooms out of the signals for a better overview at the **Reference Line**. The time interval between two grid lines gets larger.
- **All** shows the complete content of the task recording buffer.

Code Show opens the disassembly or source code window at the code line that caused the task transition.

Trace Show opens the windows Trace Data and the Trace Navigation. The data get synchronized between the windows.

Update Screen buttons control the screen output.

- **Stop** freezes the graphical display. µVision continues filling the task recording buffer. When clicked, the button changes its boilerplate text to **Start**.
- **Start** unfreezes the graphical display. The data of the task recording buffer and the incoming data are shown. When clicked, the button changes its boilerplate text to **Stop**.
- **Clear** empties the recording buffer and clears the Event Viewer display area.

Transition buttons snap the **reference line** to the next transition point. Highlight a task name and click:

- **Priv** to move the **Reference Line** to the previous transition point, or press the **Left-Arrow** key.
- **Next** to move the **Reference Line** to the succeeding transition point, or press the **Right-Arrow** key.

Checkboxes

- **Cursor** enables a **Mouse Cursor Line**, which moves with the mouse. Mouse position data and deltas to the **Reference Line** are displayed on the timestamp axis.
- **Show Cycles** enables cycle information, which are displayed on the timestamp axis.
- **Task Info** enables task details at mouse position.

Additional mouse and key commands

- One **mouse click** into the display area sets the **Reference Line**.
- A **double-click** into the display area switches off the **Reference Line**.
- The **mouse wheel** zooms in and out at mouse position.
- **Shift+*mouse move*** snaps the **Mouse Cursor Line** to the next or previous transition point of the task the mouse is pointing to. The transition point has to be visible in the displaying area.
- Press the **Up-** and **Down-Arrow** keys to highlight the next task.
- A **double-click** on **All Tasks** changes the graphic shape.

Prerequisites for using the Event Viewer

1. Use the RTX Kernel, which can be set in the field **Options for Target - Target - Operating system** as described in Set Options for Target.
2. Enable **ITM Stimulus Port 31**.
3. Enable **Timestamps**.
4. Configure the target as described in
   - Configure Cortex-M Devices for Tracing when using an ULINK*Pro* debugger adapter.
   - Configure Cortex-M Devices for Tracing when using an ULINK2 debugger adapter.
   - Configure Cortex-M Devices for Tracing when using an J-Link/J-Trace debugger adapter.