

# trace-systemview

## *User Manual*



**MICROEJ<sup>®</sup>**

Reference:	TLT-XXX-MAN-trace-systemview-trace-systemview
Version:	2.2.0
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# Chapter 1. File Documentation

## 1.1. LLMJVM\_MONITOR\_sysview.h File Reference

```
#include <stdint.h>
```

### 1.1.1. Functions

- void LLMJVM\_MONITOR\_SYSTEMVIEW\_send\_task\_list ( void )

### Detailed Description

MicroEJ Trace library low level API.

Author: . MicroEJ Developer Team

Version: . 2.2.0

Date: . 28 April 2022

Definition in file C:/Jenkins/workspace/master2c57aa65/com.microej.clibrary.llimpl.trace-sysview/target~/ccomponentWorking/bsp/trace/inc/LLMJVM\_MONITOR\_sysview.h

## 1.2. LLTRACE\_sysview\_configuration.h File Reference

### 1.2.1. Macros

- #define MICROEJ\_TRACE\_MAX\_THREAD\_NAME\_LENGTH (32)
- #define MICROEJ\_TRACE\_MAX\_NB\_THREADS (16)
- #define MICROEJ\_TRACE\_OVER\_RTOS 1
- #define MICROEJ\_TRACE\_ENABLE\_ALLOCATIONS 0
- #define MICROEJ\_TRACE\_ENABLE\_EXCEPTIONS 1
- #define MICROEJ\_TRACE\_API\_ID\_OFFSET (500u)
- #define MICROEJ\_TRACE\_MAX\_NB\_MODULES (8)
- #define MICROEJ\_TRACE\_MAX\_MODULE\_DESCRIPTION\_LENGTH (16)
- #define MICROEJ\_TRACE\_MODULE\_DESCRIPTION\_PREFIX "M="
- #define MICROEJ\_TRACE\_WAIT\_FOR\_SYSVIEW\_CONNECTION 0

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### 1.3. LLMJVM\_MONITOR\_sysview.c File Reference

```
#include <LLMJVM_MONITOR_impl.h>
```

```
#include <MJVM_MONITOR.h>
```

```
#include <trace.h>
```

```
#include <SEGGER_SYSVIEW.h>
```

```
#include <stdio.h>
```

```
#include <string.h>
```

```
#include "LLMJVM_MONITOR_sysview.h"
```

```
#include "LLTRACE_sysview_configuration.h"
```

#### 1.3.1. Macros

- #define THREAD\_GC\_UID (0xFF)
- #define THREAD\_GC\_NAME "GC"
- #define THREAD\_GC\_PRIORITY (11)
- #define apilD\_ALLOCATE (0u)

- `#define apilD_EXCEPTION (1u)`

### 1.3.2. Functions

- `static void LLMJVM_MONITOR_SYSTEMVIEW_send_thread_info ( int32_t thread_id)`
- `static void LLMJVM_MONITOR_SYSTEMVIEW_send_gc_thread_info ( )`
- `void LLMJVM_MONITOR_SYSTEMVIEW_send_task_list ( void )`
- `void LLMJVM_MONITOR_IMPL_initialize ( bool auto_start)`
- `void LLMJVM_MONITOR_IMPL_on_shutdown ( void )`
- `void LLMJVM_MONITOR_IMPL_on_thread_create ( int32_t thread_id)`
- `void LLMJVM_MONITOR_IMPL_on_thread_modified ( int32_t thread_id)`
- `void LLMJVM_MONITOR_IMPL_on_thread_state_changed ( int32_t thread_id, MJVM_MONITOR_state_t new_state)`
- `void LLMJVM_MONITOR_IMPL_on_idle ( void )`
- `void LLMJVM_MONITOR_IMPL_on_gc_start ( int32_t current_thread_id)`
- `void LLMJVM_MONITOR_IMPL_on_gc_stop ( int32_t current_thread_id)`
- `void LLMJVM_MONITOR_IMPL_on_allocate ( void * type, int32_t size, void * method, void * instruction_address, int32_t total_memory, int32_t free_memory, bool immortal)`
- `void LLMJVM_MONITOR_IMPL_on_exception ( void * exception_type, void * throw_method, void * throw_instruction_address, void * catch_method, void * catch_instruction_address, const char * message)`

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Definition in file `C:/Jenkins/workspace/master2c57aa65/com.microej.clibrary.llimpl.trace-systemview/target~/.ccomponentWorking/bsp/trace/src/LLMJVM_MONITOR_sysview.c`

## 1.4. LLTRACE\_sysview.c File Reference

```
#include <LLTRACE_impl.h>
```

```
#include <SEGGER_SYSVIEW.h>
```

```
#include <string.h>
```

```
#include <stdbool.h>
```

```
#include <stdio.h>
```

```
#include "LLTRACE_sysview_configuration.h"
```

### 1.4.1. Variables

- SEGGER\_SYSVIEW\_MODULE LLTRACE\_modules
- char \* LLTRACE\_module\_names
- int32\_t LLTRACE\_next\_free\_module\_offset
- bool LLTRACE\_started

### 1.4.2. Functions

- void LLTRACE\_IMPL\_start ( )
- void LLTRACE\_IMPL\_stop ( )
- bool LLTRACE\_IMPL\_is\_started ( )
- int32\_t LLTRACE\_IMPL\_declare\_event\_group ( const char \* group\_name, int32\_t nb\_events)
- void LLTRACE\_IMPL\_record\_event\_void ( int32\_t group\_id, int32\_t event\_id)
- void LLTRACE\_IMPL\_record\_event\_u32 ( int32\_t group\_id, int32\_t event\_id, uint32\_t value0)
- void LLTRACE\_IMPL\_record\_event\_u32x2 ( int32\_t group\_id, int32\_t event\_id, uint32\_t value1, uint32\_t value2)
- void LLTRACE\_IMPL\_record\_event\_u32x3 ( int32\_t group\_id, int32\_t event\_id, uint32\_t value1, uint32\_t value2, uint32\_t value3)
- void LLTRACE\_IMPL\_record\_event\_u32x4 ( int32\_t group\_id, int32\_t event\_id, uint32\_t value1, uint32\_t value2, uint32\_t value3, uint32\_t value4)
- void LLTRACE\_IMPL\_record\_event\_u32x5 ( int32\_t group\_id, int32\_t event\_id, uint32\_t value1, uint32\_t value2, uint32\_t value3, uint32\_t value4, uint32\_t value5)

- void LLTRACE\_IMPL\_record\_event\_u32x6 ( int32\_t group\_id, int32\_t event\_id, uint32\_t value1, uint32\_t value2, uint32\_t value3, uint32\_t value4, uint32\_t value5, uint32\_t value6)
- void LLTRACE\_IMPL\_record\_event\_u32x7 ( int32\_t group\_id, int32\_t event\_id, uint32\_t value1, uint32\_t value2, uint32\_t value3, uint32\_t value4, uint32\_t value5, uint32\_t value6, uint32\_t value7)
- void LLTRACE\_IMPL\_record\_event\_u32x8 ( int32\_t group\_id, int32\_t event\_id, uint32\_t value1, uint32\_t value2, uint32\_t value3, uint32\_t value4, uint32\_t value5, uint32\_t value6, uint32\_t value7, uint32\_t value8)
- void LLTRACE\_IMPL\_record\_event\_u32x9 ( int32\_t group\_id, int32\_t event\_id, uint32\_t value1, uint32\_t value2, uint32\_t value3, uint32\_t value4, uint32\_t value5, uint32\_t value6, uint32\_t value7, uint32\_t value8, uint32\_t value9)
- void LLTRACE\_IMPL\_record\_event\_u32x10 ( int32\_t group\_id, int32\_t event\_id, uint32\_t value1, uint32\_t value2, uint32\_t value3, uint32\_t value4, uint32\_t value5, uint32\_t value6, uint32\_t value7, uint32\_t value8, uint32\_t value9, uint32\_t value10)
- void LLTRACE\_IMPL\_record\_event\_end ( int32\_t group\_id, int32\_t event\_id)
- void LLTRACE\_IMPL\_record\_event\_end\_u32 ( int32\_t group\_id, int32\_t event\_id, uint32\_t value1)

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