



## **Program Listing for File event\_based\_scheduler.hpp**

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`include/holoscan/core/schedulers/gxf/event_based_scheduler.hpp )`

```
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or agreed to in writing, software * distributed under the License is distributed on an
"AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express or implied. * See the License for the specific language governing
permissions and * limitations under the License. */ #ifndef
HOLOSCAN_CORE_SCHEDULERS_GXF_EVENT_BASED_SCHEDULER_HPP #define
HOLOSCAN_CORE_SCHEDULERS_GXF_EVENT_BASED_SCHEDULER_HPP #include
<cstdint> #include <memory> #include <string> #include
<gxf/std/event_based_scheduler.hpp> #include "../gxf/gxf_scheduler.hpp"
#include "../resources/gxf/clock.hpp" #include
"../resources/gxf/realtime_clock.hpp" namespace holoscan { class
EventBasedScheduler : public gxf::GXFScheduler { public:
HOLOSCAN_SCHEDULER_FORWARD_ARGS_SUPER(EventBasedScheduler,
gxf::GXFScheduler) EventBasedScheduler() = default; const char* gxf_typename()
const override { return "nvidia::gxf::EventBasedScheduler"; } std::shared_ptr<Clock>
clock() override { return clock_.get(); } void setup(ComponentSpec& spec) override;
void initialize() override; // Parameter getters used for printing scheduler description
(e.g. for Python __repr__) int64_t worker_thread_number() { return
worker_thread_number_; } bool stop_on_deadlock() { return stop_on_deadlock_; }
int64_t stop_on_deadlock_timeout() { return stop_on_deadlock_timeout_; } // could
return std::optional<int64_t>, but just using int64_t simplifies the Python bindings
int64_t max_duration_ms() { return max_duration_ms_.has_value() ?
max_duration_ms_.get() : -1; } nvidia::gxf::EventBasedScheduler* get() const; private:
Parameter<std::shared_ptr<Clock>> clock_; Parameter<int64_t>
worker_thread_number_; Parameter<bool> stop_on_deadlock_; Parameter<int64_t>
max_duration_ms_; Parameter<int64_t> stop_on_deadlock_timeout_; // in ms // The
following parameter needs to wait on ThreadPool support // Parameter<bool>
```

```
    thread_pool_allocation_auto_; }; } // namespace holoscan #endif/*  
HOLOSCAN_CORE_SCHEDULERS_GXF_EVENT_BASED_SCHEDULER_HPP */
```

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