header
<chrono>

Time library

`chrono` is the name of a header, but also of a sub-namespace: All the elements in this header (except for the common_type specializations) are not defined directly under the `std` namespace (like most of the standard library) but under the `std::chrono` namespace.

The elements in this header deal with time. This is done mainly by means of three concepts:

Durations
They measure time spans, like: one minute, two hours, or ten milliseconds.
In this library, they are represented with objects of the duration class template, that couples a *count representation* and a *period precision* (e.g., ten milliseconds has ten as *count representation* and milliseconds as *period precision*).

Time points
A reference to a specific point in time, like one's birthday, today's dawn, or when the next train passes.
In this library, objects of the time_point class template express this by using a duration relative to an *epoch* (which is a fixed point in time common to all time_point objects using the same clock).

Clocks
A framework that relates a *time point* to real physical time.
The library provides at least three clocks that provide means to express the current time as a time_point: system_clock, steady_clock and high_resolution_clock.

For typical examples, see steady_clock or system_clock.

Classes

`duration` and `time_point`:

duration	Duration (class template)
time_point	Time point (class template)

clocks:

system_clock	System clock (class)
steady_clock	Steady clock (class)
high_resolution_clock	High resolution clock (class)

traits:

treat_as_floating_point	Treat as floating point (class template)
duration_values	Duration values (class template)
common_type (duration)	Specialization of common_type for duration (class template)

Functions

duration_cast	Duration cast (function template)
time_point_cast	Time_point cast (function template)

Class instantiation typedefs

The following convenience typedefs of instantiations of `duration` are also defined in this namespace:

hours	Duration in hours (class)
minutes	Duration in minutes (class)
seconds	Duration in seconds (class)
milliseconds	Duration in milliseconds (class)
microseconds	Duration in microseconds (class)
nanoseconds	Duration in nanoseconds (class)