

Tracy Profiler Macros – Cheat Sheet

Grouped by category • Based on Tracy User Manual (2025)

■ Zones (Code Profiling)

Macro	Description
ZoneScoped / ZoneScopedN(name)	Start profiling zone (RAII), optional name.
ZoneScopedC(color) / ZoneScopedNC(name,color)	Add custom color and name.
ZoneText(text,size) / ZoneTextF(fmt,...)	Attach text or formatted text to zone.
ZoneName(text,size)	Assign runtime name (not grouped).
ZoneColor(color)	Override zone color dynamically.
ZoneValue(uint64_t)	Attach numeric value.
ZonelsActive	Check if zone is active.
ZoneNamed / ZoneNamedN / ZoneNamedC / ZoneNamedNC	Manual zone management.
ZoneTransient	Transient zones for unloadable code.

■ Note — Stack Depth Variants:

For zones, memory, messages, and GPU profiling, Tracy provides “S” variants that include a **stack depth parameter** (e.g., ZoneScopedS, TracyAllocS, TracyGpuZoneS). These allow you to control how many call frames are captured when the event occurs — useful for reducing overhead in tight loops or when full call stacks aren’t needed.

Examples include:

ZoneScopedS, ZoneScopedNS, ZoneScopedCS, ZoneScopedNCS, TracyAllocS, TracyFreeS, TracySecureAllocS, TracySecureFreeS, TracyMessageS, TracyMessageLS, TracyMessageCS, TracyMessageLCS, TracyGpuZoneS, TracyGpuZoneCS, TracyVkZoneS, TracyVkZoneCS.

■ ■ Frame Markers

FrameMark	Mark end of a frame.
FrameMarkNamed(name)	Mark frame for subsystem (e.g. Physics).
FrameMarkStart(name) / FrameMarkEnd(name)	Discontinuous frames.
FrameImage(image,width,height,offset,flip)	Attach screenshot to frame.

■ Locks / Mutexes

TracyLockable(type,var)	Replace mutex with traceable lock.
TracyLockableN(type,var,name)	Lock with global name.
TracySharedLockable / TracySharedLockableN	Shared mutex support.
LockableName(var,name,size)	Set runtime name.
LockableBase(type)	Wrapper for std::lock_guard.
LockMark(var)	Mark lock hold point.

■ Plots

TracyPlot(name,value)	Record numeric value for chart.
TracyPlotConfig(name,format,step,fill,color)	Configure plot display style.
Formats	Number, Memory, Percentage.

■ Messages

TracyMessage(text,size)	Log a text message.
TracyMessageL("literal")	Literal string, faster.
TracyMessageC / LC	Colored message (runtime/literal).
TracyAppInfo(text,size)	Attach app metadata (version, etc.).

■ Memory Profiling

TracyAlloc(ptr,size)	Report memory allocation.
TracyFree(ptr)	Report free.
TracySecureAlloc / Free	Safe TLS-aware versions.

■ Fibers

TracyFiberEnter(name)	Mark entering fiber.
TracyFiberLeave	Mark leaving fiber.
TRACY_FIBERS	Enable fiber tracking globally.

■ GPU Profiling

TracyGpuZone(name)	Profile GPU region.
TracyGpuNamedZone(var,name)	Named GPU zone.
TracyGpuCollect(ctx)	Fetch GPU timestamps.
TracyCLZone / TracyCUDAContext	OpenCL / CUDA support.
TracyCUDAStartProfiling / StopProfiling	Begin/end CUDA profiling.

■ Threads & Connection

tracy::SetThreadName(name)	Set thread name (C++).
TracyCSetThreadName(name)	C API version.
TracyCIsConnected	Check profiler connection.

■■ Configuration / Flags

TRACY_ENABLE	Enable Tracy instrumentation.
TRACY_NO_VERIFY	Disable C API validation.
TRACY_NO_CRASH_HANDLER	Disable crash handler.
TRACY_NO_STATISTICS	Disable statistics aggregation.
TRACY_FIBERS	Enable fiber support.
TRACY_NO_ROOT_WINDOW	Disable profiler main window.