

BECKHOFF



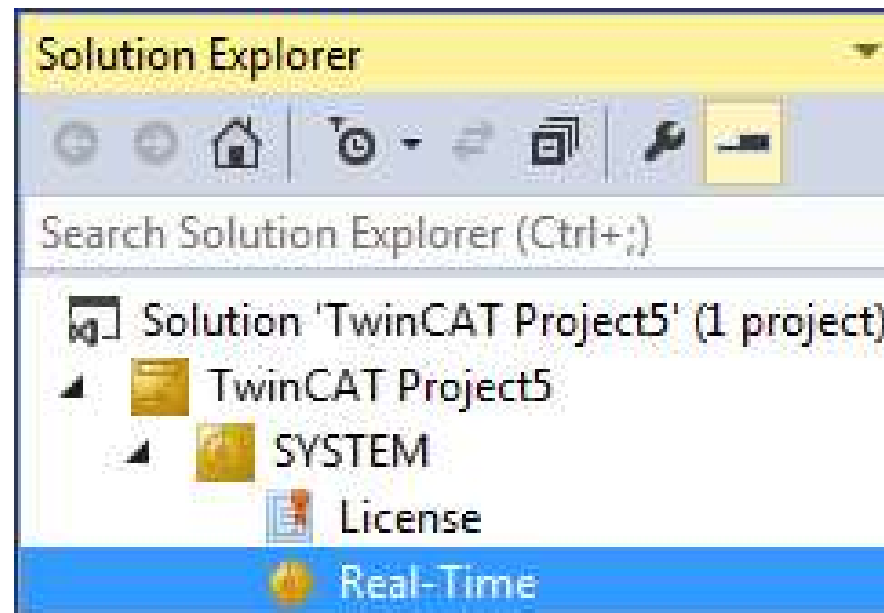


Multiple CPU Cores

Multiple CPU Cores

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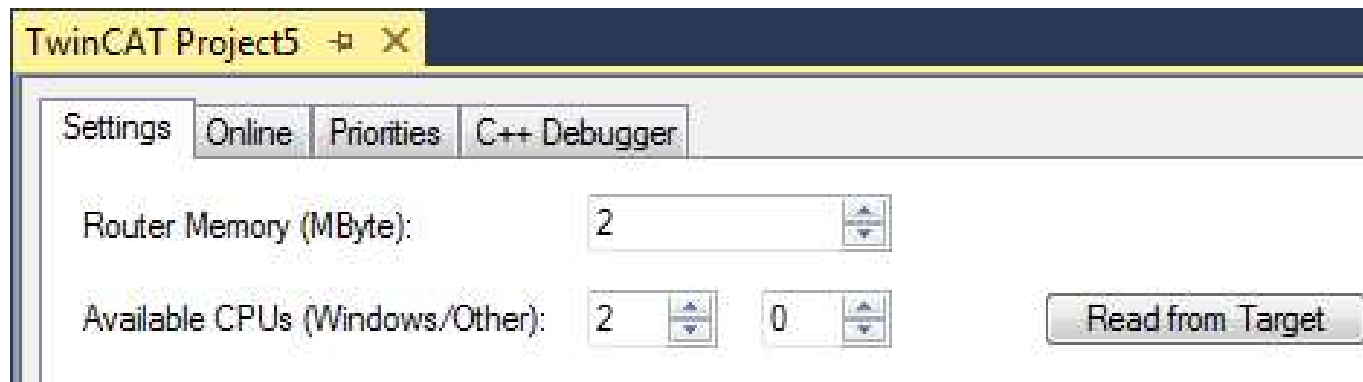
- In the 'Solution Explorer, under 'System', select 'Real-Time'



Multiple CPU Cores

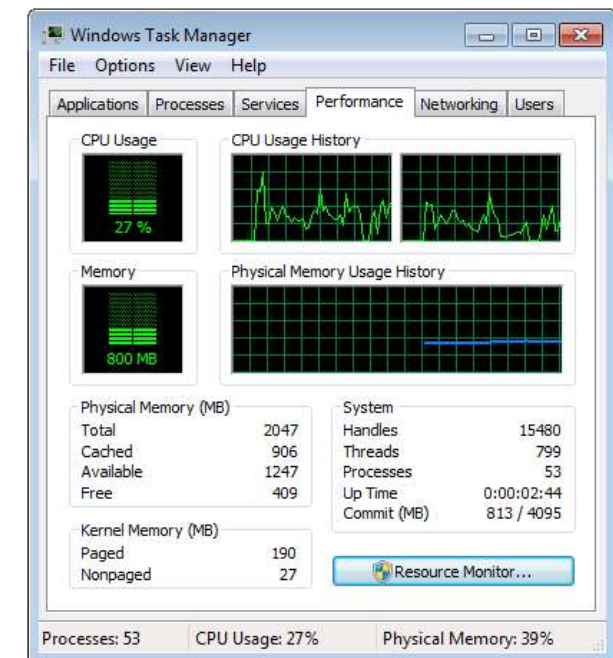
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- Use the 'Read from Target' button to read the number of CPU cores on the target Computer



- The number of cores should match the Windows Task Manager

Note: TwinCAT only counts real cores



Multiple CPU Cores

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- Check the 'RT-CPU' box to enable TwinCAT to use a specific core.

TwinCAT Project5

Settings Online Priorities C++ Debugger

Router Memory (MByte): 2

Available CPUs (Windows/Other): 2 0

Read from Target Set on target

CPU	RT-CPU	Base Time	CPU Limit	Latency Warning
0	☒	1 ms	80 %	(none)
1	☒ Default	50 μ s	80 %	(none)

Multiple CPU Cores

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- It is also possible to set the base time for task that will run on this core.
- The CPU Limit when sharing the core with Windows is 80%

TwinCAT Project5

Settings Online Priorities C++ Debugger

Router Memory (MByte): 2

Available CPUs (Windows/Other): 2 0

Read from Target Set on target

CPU	RT-CPU	Base Time	CPU Limit	Latency Warning
0	☒	1 ms	80 %	(none)
1	☒ Default	50 μ s	80 %	(none)

Multiple CPU Cores

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- In the 'RT-CPU' column use the drop down list to assign a specific task to a specific core.
- These can be PLC, Motion, or C++ tasks.

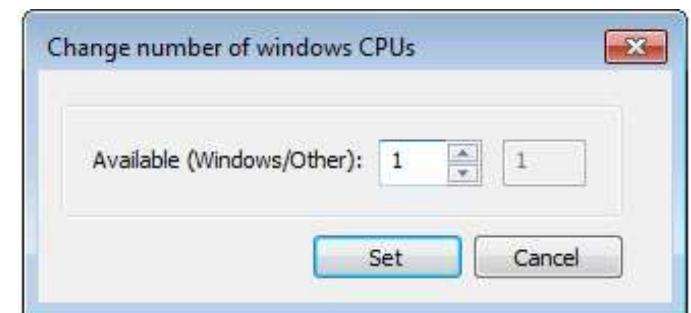
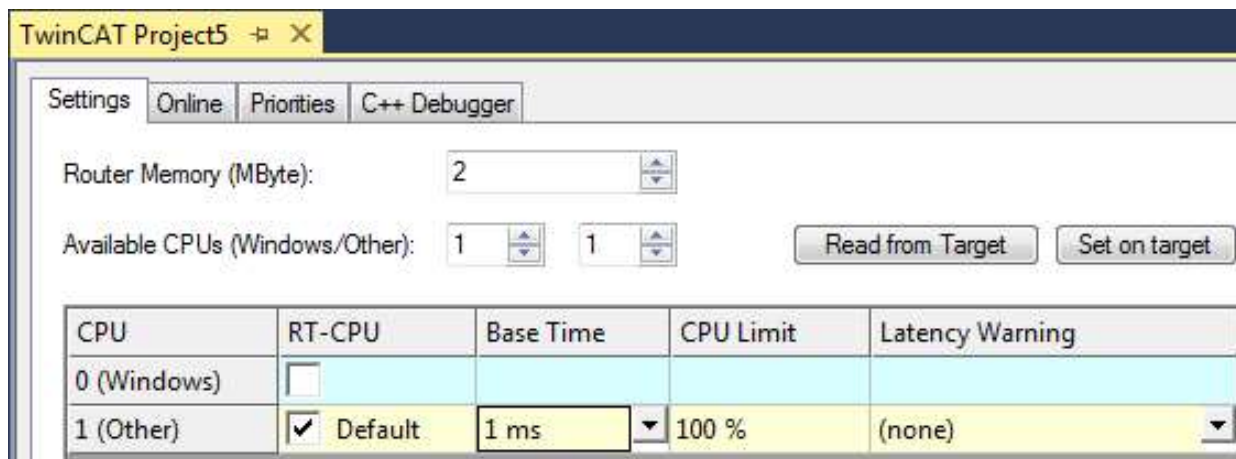
Type	Object	RT-CPU	Base Time
TASK	PlcAuxTask	CPU 0	1 ms
TASK	PlcFastTask	CPU 1	50 µs
TASK	NC-Task 1 SAF	CPU 1	50 µs
TASK	PlcTask	CPU 0	1 ms

CPU Core Isolation

Multiple CPU Cores

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- Core Isolation allows for a CPU core to be hidden from windows. This will allow TwinCAT to use 100% of the isolated core.
- Click the 'Set on Target' button, adjust the Available CPUs and click 'Set'. A reboot is required.



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