**Affinity**

Why set up CPU and I/O affinity?

To carry out multitasking, Microsoft Windows sometimes move process threads among different processors. Although efficient from an operating system point of view, this activity can reduce Microsoft SQL Server performance under heavy system loads, as each processor cache is repeatedly reloaded with data. Assigning processors to specific threads can improve performance under these conditions by eliminating processor reloads; such an association between a thread and a processor is called processor affinity.

Can affect performance. Setting up affinity can improve performance.

Processor affinity means the SQL server instance will only use the specified processor and that each query scheduler should use a single processor

I/O affinity means

File groups

Individual tables can be assigned to different file groups and so reduce i/o contentions