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   Sommario/riassunto   While modern CPUs offer an increasing number of cores with shared
                        caches, prevailing execution engines for business processes,
                        workflows, or Web service compositions have not been optimized for
                        properly exploiting the abundant processing resources of such CPUs.
                        One factor limiting performance is the inefficient thread scheduling by
                        the operating system, which can result in suboptimal use of shared
                        caches. In this paper we study performance of the JOpera business
                        process execution engine on a recent multicore machine. By analyzing
                        the engine's architecture and by binding threads that are likely to
                        access shared data to cores with a common cache, we achieve
                        speedups up to 13% for a variety of workloads, without modifying the
                        engine's architecture and implementation, apart from binding threads
                        to CPUs. As the engine is implemented in Java, we provide a new Java
                        library to manage thread bindings and hardware performance counters.
                        We also leverage hardware performance counters to explain the
                        observed speedup in our performance analysis.