

Migrating Traditional Business Rules Applications to the Cloud

Alexander Schmidt
InRule Technology, Inc., Chicago, IL

Abstract: To minimize total cost of ownership (TCO), and simplify management of the business rules, the use of Business Rules Engines (BRE) arises. The question whether you find yourself changing business rules often, you probably need a business rule engine because it is quicker and easier to change the rules in order to complete the change process. If you find yourself having to make changes quickly, you will also find a need for a BRE as well. It may be that a set of business rules don't change often, but when they do the change has to be made in a zero-latency fashion. If you wish to manage the rule rollout you might also need a business rule management system (BRMS), which would either augment a BRE or surround a BRE with a rule repository as a complete package. The rule repository component for the BRMS is based on the table storage. High-performance systems require parallel processing of the rules. We propose a novel approach of executing these rules in the Cloud. The proposed approach centers on the concept of parallel execution of rules, which exposes runtime information to the Cloud services. The review of common problems with performance and scalability is presented in the context of business rules execution and possible optimizations in various scenarios. This work is first motivated with experiments in a simulated environment, and then validated using AppFabric running on Microsoft Azure platform.

Keywords: BRE, cloud computing, parallel algorithms