

**A New Approach to Generate Web Services Models from Distributed  
User Requirements  
(DRWS)**

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**Abstract**

The Web Service standard has been integrated into several development frameworks that allow making the development more rapidly and desires to automate parts of the development process. This research explored the problem of transforming distributed requirement to web services, by analyzing the distributed requirements specifications to determine which requirements are supposed to be a web service.

Under this concern, this research proposes a Case Tool Distributed Requirements WebService (DRWS) to support the automated approach to generate web service from distributed requirement written in natural language. DRWS provides a front-end interface that permits to developers for designing their planed system by using distributed software requirements. DRWS used the natural language process parser to define the concepts and the interaction between them from distributed requirements.

This research compared the DRWS and S-Case approaches by deploying them in three different applications. The result indicated that, there was a difference between DRWS and S-Case in effort reduction and requirements coverage, this difference represented by the improvement in effort reduction and requirements coverage by (15.9, 18.38, 30 %) and (5.4, 5, 6.25 %) respectively for the three different application by using DRWS.