# Restful-based Mobile Web Service Migration Framework (Presentation)

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In this abstract we present our work [1]. The original paper describes the RESTful-based framework proposed for Mobile Web service migration and provisioning on both Android-based mobile devices and Java-based stationary devices in P2P wireless network. The proposed Web service migration framework enables deploying, publishing, discovering, provisioning and migrating Web services to satisfy service providers' and Web services' preferences and improve *QoS* performance.

We proposed service migration to improve service performance by moving a mobile hosted Web service to another mobile device that satisfies its preferences. For experiments, we used a video transcoding service as an example service and compared between its performace before and after the migration. Moreover, we collected the consumptions of mobile device resources (i.e., CPU and Battery power) by the service migration.

The migration mechanism considers matching between services and service providers preferences described as Jena rules based on their owl/rdf semantic properties. Based on service and service provider properties and preferences a suggested list of possible migration is provided. The framework chooses the best migration to perform through the proposed AHP multi-criteria decision making process.

Based on the performed experiments, we see that our framework enables a seamless adaptation in SOA to redistribute system components and improves service (i.e., the utilized video transcoding service) performance with low consumptions of mobile resources. Moreover, The experiments shows the service performance improvements gained by the migration.

## References

[1] M. Mohanned Kazzaz & Marek Rychlỳ (2017): *Restful-based Mobile Web Service Migration Framework*. In: *2017 IEEE International Conference on AI & Mobile Services, AIMS 2017*, IEEE, pp. 70–75.

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