Application function placement optimization in a mobile distributed cloud environment

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Distributed Computing in 5G Mobile Networks is a potential requirement for certain applications that depends on low latency and information sharing, through or with data information sources. Such applications may be observed as a distributed application, however there is no complete methodology present for deploying such applications that considers the special application domain[4, **?**, **?**]. We present a tool and method to optimize the partition of applications[2, 3, 5], dividing them into Modules, to deploy them in a distributed 5G Mobile Network environment. To do so we apply an approximation algorithm for the Path Computation and Function Placement Problem described in [1] . We show that under certain circumstances it is beneficial to deploy parts of such applications in a Cloud Computing environment with Distributed Cloud resources at the Mobile Network Edge. We verify our findings with an example, an Augmented Reality application.

References

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