Elastic Auto-Scaling Architecture in Telco Cloud

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Abstract— Cloud Computing has been the development trend of the world because of many benefits such as cost, scalability, performance, security, speed, productivity, and reliability. Then it is applied in many different fields. In particular, in the field of Telco cloud, the movement has developed strongly in recent times of fifth-generation (5G) telecommunication applications technology, meeting the ability to create quick and reliable telecommunications services with the support of automation, calculating elastic through Auto-Scaling mechanism. Now the cloud development in two directions is Virtualized Network Functions (VNFs) and Containerized Network Functions (CNFs), so Auto Scaling must adapt to their presence. So here we offer Auto Scaling architecture with two algorithms suitable for Telco Cloud infrastructure to meet both VNF and CNF with a single module.

Keyword— Auto-scaling, Scalability, Telecom, Telco Cloud, Cloud computing, Cloud-native



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