Build-Ship-Run approach for a CORD-in-a-Box deployment

5G is expected to provide high bandwidth and low latency communications, thus allowing Telco operators to provide new services to their end customers. This increase in performance is achieved through the migration of network functions from the core to the edge of the network and facilitated by the flexibility and automation provided by Software Defined Networking (SDN) and Network Function Virtualization (NFV). To pave the way to 5G, and simplify the management of 5G deployments a number of SDN/VNF platforms has been developed in the recent years. However deploying and configuring the platforms themselves, is a complex and time consuming task which can act as a barrier to their adoption by Telco operators. This is because Telco Operators strive for fast provisioning times and zero-touch provisioning. Based on this observation, this paper proposes a Build-Ship-Run platform deployment using Central Office Rearchitected as a Datacenter (CORD) as an exemplar platform. The proposed approach is based on the use of compressed Virtual Machine snapshots, which allow preconfigured CORDflavors to be fetched, uncompressed and deployed on demand. Using the proposed workflow, a deployment time seven times better than the raw installation is demonstrated.

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