

# Cloud Infrastructure



## Introduction

Virtualisation is a key strategic direction for Network Operators and their suppliers. From SDN to NFV, 5G to IoT, every conversation is dominated by this topic.

In this maelstrom of technical activity one thing that is being under-discussed is the commercial and operating models that will exist once this network virtualisation revolution has turned a few cycles. As operators have more discussions with technology providers about widgets and wonders of whatever there is a sense that the network owners preferred end game is not clearly in focus.

Meanwhile the compute world had their revolution and we now call the result of that revolution "Cloud".

## Executive Summary

Without the automation of federation in Networks that we already see with cloud providers, we can see that a virtualised or sliced network will be just as costly to consume as its non-virtualised/non-sliced cousin.

To enable the automation of a federated application/compute/network "slice", Configured Things addresses the fractal nature of co-operation within and across organisational boundaries, of mixed applications sharing common resource, compute, network and sensor (IoT) infrastructure.

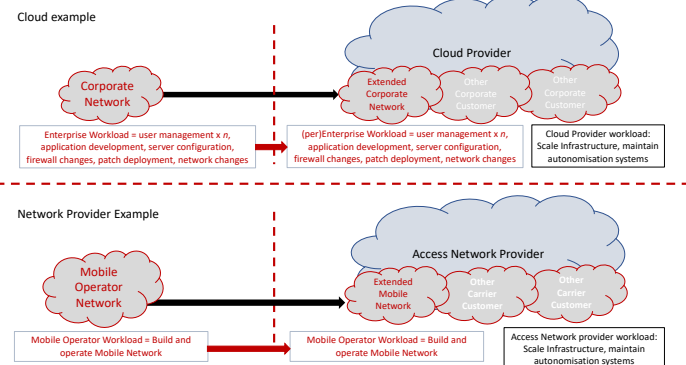
Cloud Infrastructure is the extension of the existing cloud compute business model that will underpin 5G, Smart Cities, IoT and more.

# The Configured Things vision for a new approach

## Network Slicing extending the revolution.

For Configured Things the emergence of cloud computing as an accepted business model is proof that diverse organisations can and will co-operate on infrastructure. An Enterprise will blithely consume virtualised resource from any number of infrastructure providers seamlessly alongside assets that they physically own. In turn the cloud provider will have thousands perhaps millions of clients controlling aspects of the cloud provider's infrastructure, under policies that are both technical and commercial in aspect.

It is outside of the Data centre of course that the revolution is now focused. Technology companies and standards bodies in the networking space are making great progress defining the required functions. For Configured Things we see these beginnings as analogous to server virtualisation technology; it may reduce network costs but it needs something else to create a new market paradigm.



## Fully realising Cloud Infrastructure.

Consider an Access Network provider delivering service to a Mobile Network Operator. Analogous to cloud, the Access Network should be consumed autonomously by the Mobile Operator. This automation will be regulated by a commercial and technical framework that is defined by all concerned parties within the Access Network providers organisation. Multiply this number of relationships by  $n$  and you have a model of the Smart City complexities.

Configured Things fully addresses the fractal nature of this cooperating model. By enabling the creation of trusted, disaggregated systems that react real-time to changes in state or policy we provide market scale across organisational and functional silos.

