



## TANGO CLOUD NATIVE

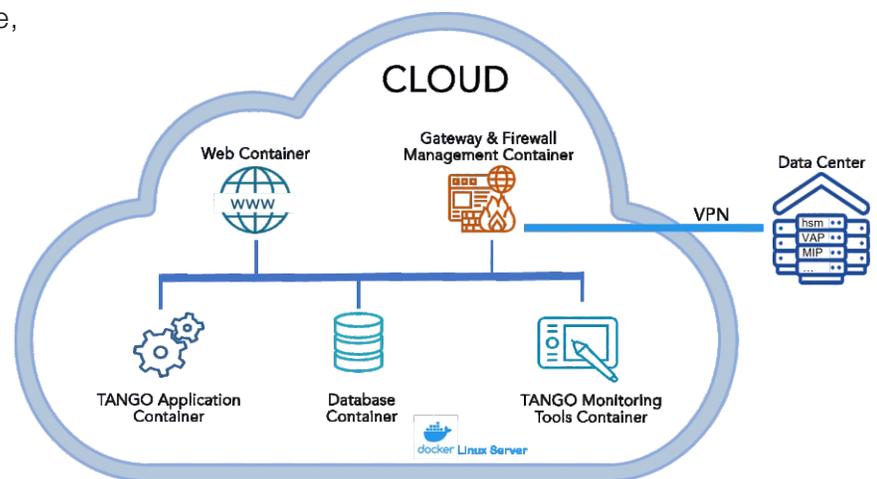
TANGO is the world's most performant Retail Payments solution with benchmark tests demonstrating 10,000 transactions per second. Built using a micro-services architecture, TANGO is also feature-rich and easily extensible. Backed by Lusion's proven track record it is not surprising that more and more organizations are swapping out their legacy payments infrastructure for TANGO.

TANGO is the culmination of decades of crafted engineering that ensures the maximum operational performance and reliability as well as the most affordable cost of ownership. For example, TANGO includes a Self-Monitoring and Auto-Spawning feature whereby a suite of timers can be configured to monitor the processing time for specific events. By comparing the real-time measurements against the defined norms TANGO can immediately identify bottlenecks as soon as they occur. TANGO can also be configured to automatically spawn new instances of the affected micro-service or process thereby ensuring the required throughput is maintained.

TANGO uses the Docker containerization platform and a typical deployment uses the 5-Container model shown below.

Significantly, the container boundaries are defined to simplify manageability. For example, the gateways and firewalls are combined in a single container to simplify PCI certification tasks. Equally, the monitoring and other tools are located in a dedicated container to ease system evolution.

This approach has numerous benefits, not least of which is that it is well proven and supports the easy and secure use of cloud infrastructure. However, in this model, container creation is still a manual process. Consequently, Lusion has expanded TANGO's container model to deliver the full elastic scalability advantages of a cloud-native environment.

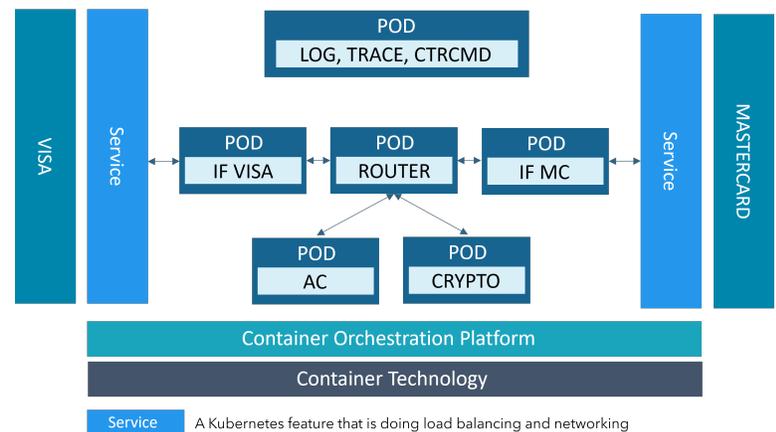


The Current Five-Container Model

## TANGO Cloud-Native Support

Introducing cloud-native support to TANGO was principally achieved through the adoption of a “many-containers” model and the addition of a container orchestration component. TANGO was already a containerized application (using Docker) so this was a relatively simple step. Given that cloud technologies are continuing to evolve, Lusion recognized the importance of providing customers with a choice of technologies. Specifically, Lusion has validated TANGO with both Kubernetes and OpenShift as the container orchestration layer. Additionally, TANGO has been certified to run on the cloud infrastructure of Azure, Amazon, and Google.

## Many Containers Deployment Example



Cloud-native support for TANGO will be launched as part of the TANGO version 8.1. release in Q4 2022.

It is significant to note that the same TANGO software is used whether TANGO is deployed on-premise, in the cloud using the 5-container approach, or using the cloud-native many containers model. Consequently, organisations can readily benefit from deploying TANGO regardless of where they are in their cloud strategy planning.

## Why should organizations embrace cloud-native applications?

There are several benefits of cloud-native applications. With traditional applications the computing hardware has to be sized for the maximum peak load and the associated hardware costs apply even when the application is under light load. With cloud-native applications the system will automatically scale up, and scale down, in line with the prevailing load and you only pay for the processing you actually use – not what you might use.

The elastic scalability also contributes to significant savings relating to disaster recovery (DR) systems. Historically, a disaster recovery system had to have the same capacity as the full production system so that it could handle the full load, regardless of when the outage occurred. However, with elastic scalability a significantly smaller DR system can be deployed and the system will automatically scale to the required load if it becomes needed.

The computing on demand feature of cloud processing also brings advantages in the testing area. Rather than absorbing the fixed costs of permanent test environments a cloud-based test system can be spun up and down as required thereby keeping the testing costs to a minimum.



*The Proven Advantage*

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