**6 Problems with Container Technology in the Enterprise**

Containers as a technology make it really easy to deploy and build an environment, but they’re stateless. This makes it difficult for enterprise organizations to ensure they are compliant and secure. It also introduces a complex issue – and storage is core to this. There are six main reasons for this:

**1.Stateless containers do not support integrated enterprise requirements**

Containers were designed to be stateless. The impact to the enterprise is that they must build parallel systems using legacy technology for their databases, instrumentation systems, message queues and stateful data.

**2. Legacy storage architectures are complex and lack API functionality to support modern automation**

The legacy infrastructures that exist don’t provide direct connectivity to the container ecosystem and they don’t have the level of API integration that the container ecosystem needs.

**3. Storage does not scale with apps and performance is unpredictable**

Other approaches to do this – gateways and distributed container systems – have performance issues and challenges around scalability.

**4. It is very difficult to move data securely between locations and/or cloud providers**

Everyone’s looking to run things in different locations. You need encryption, portability and integration that doesn’t yet exist in those spaces or span multiple environments.

**5. Management and performance toolsets are lacking**

The level of storage management for containers is lacking. If you have an application that needs to cope with web scale – infinite scalability, high performance, security and complete application control, in a single powerful platform – being able to manage storage and grow and plan that environment is very difficult.

**6. Cost model is geared towards fork lift CAPEX spikes, vendor lock-in and complex refresh cycles**

The cost models of these legacy infrastructures are difficult because people expect to pay for things as they use them and that’s not the way the infrastructure was built. In the enterprise, you have the fact that there is significant investment and they cannot just throw out what they’ve had today and reuse it.

When we are breaking a large application to smaller application, then there is an issue with integration. See the video of ISTIO and service mesh introduction.