

The Next Generation CYBER Infrastructure

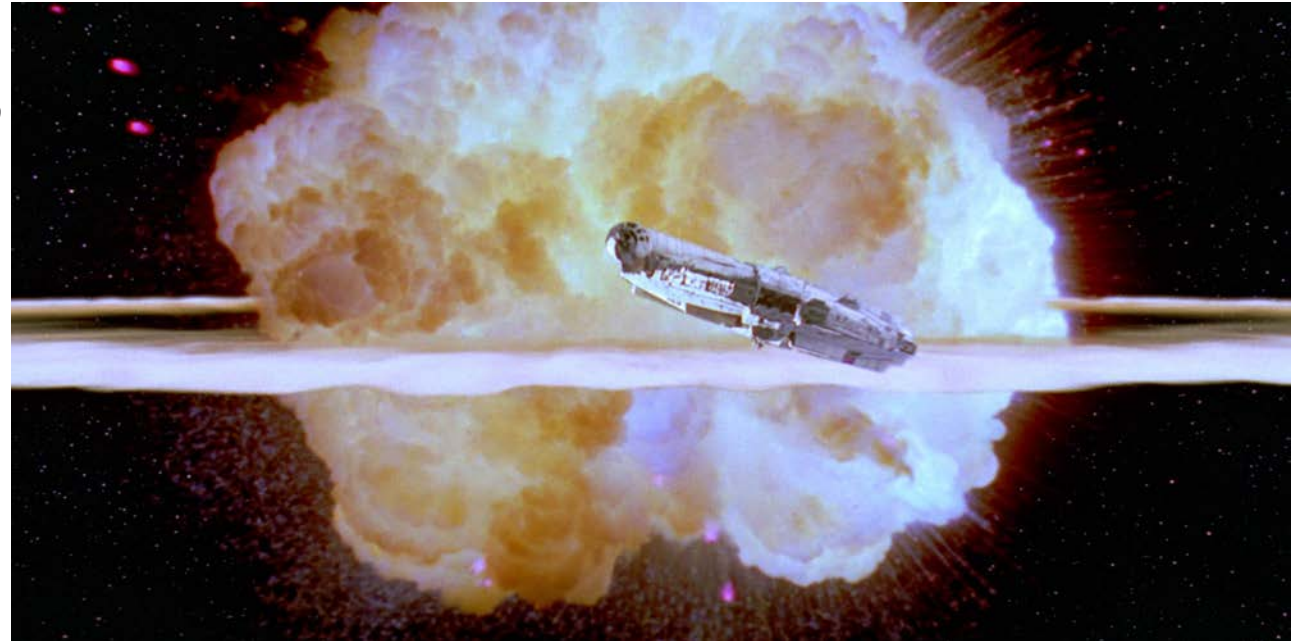
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Haven't We Learned Anything from a Perimeter-Centric Focus?

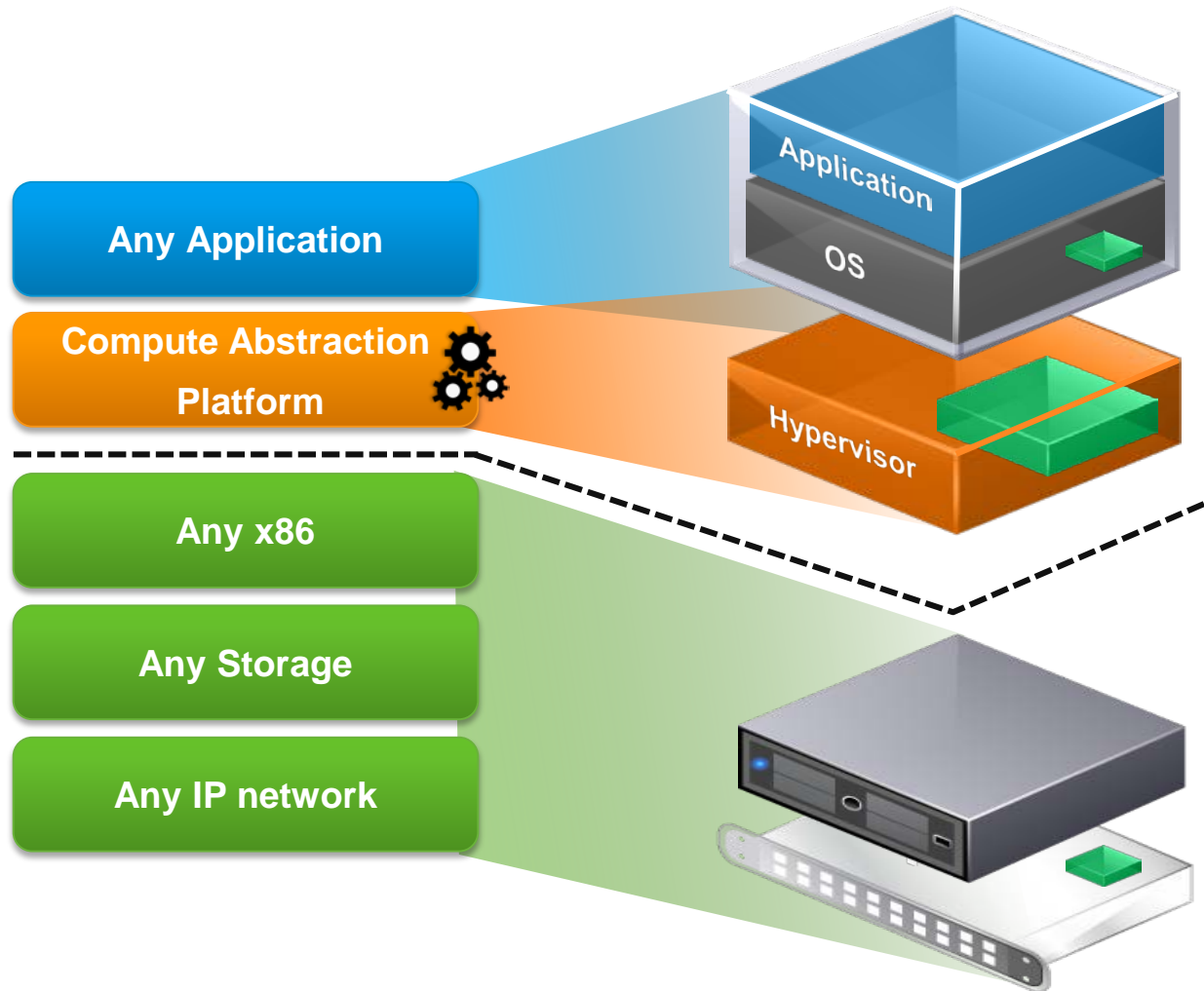
“The Empire doesn't consider a small one-man fighter to be any threat, or they'd have a tighter defense. An analysis of the plans provided by Princess Leia has demonstrated a weakness in the battle station. ...The shaft leads directly to the reactor system. A precise hit will start a chain reaction which should destroy the station.”

--General Dodanna

A Long Time Ago...In a Galaxy Far Far Away...



Trading Off Context and Isolation



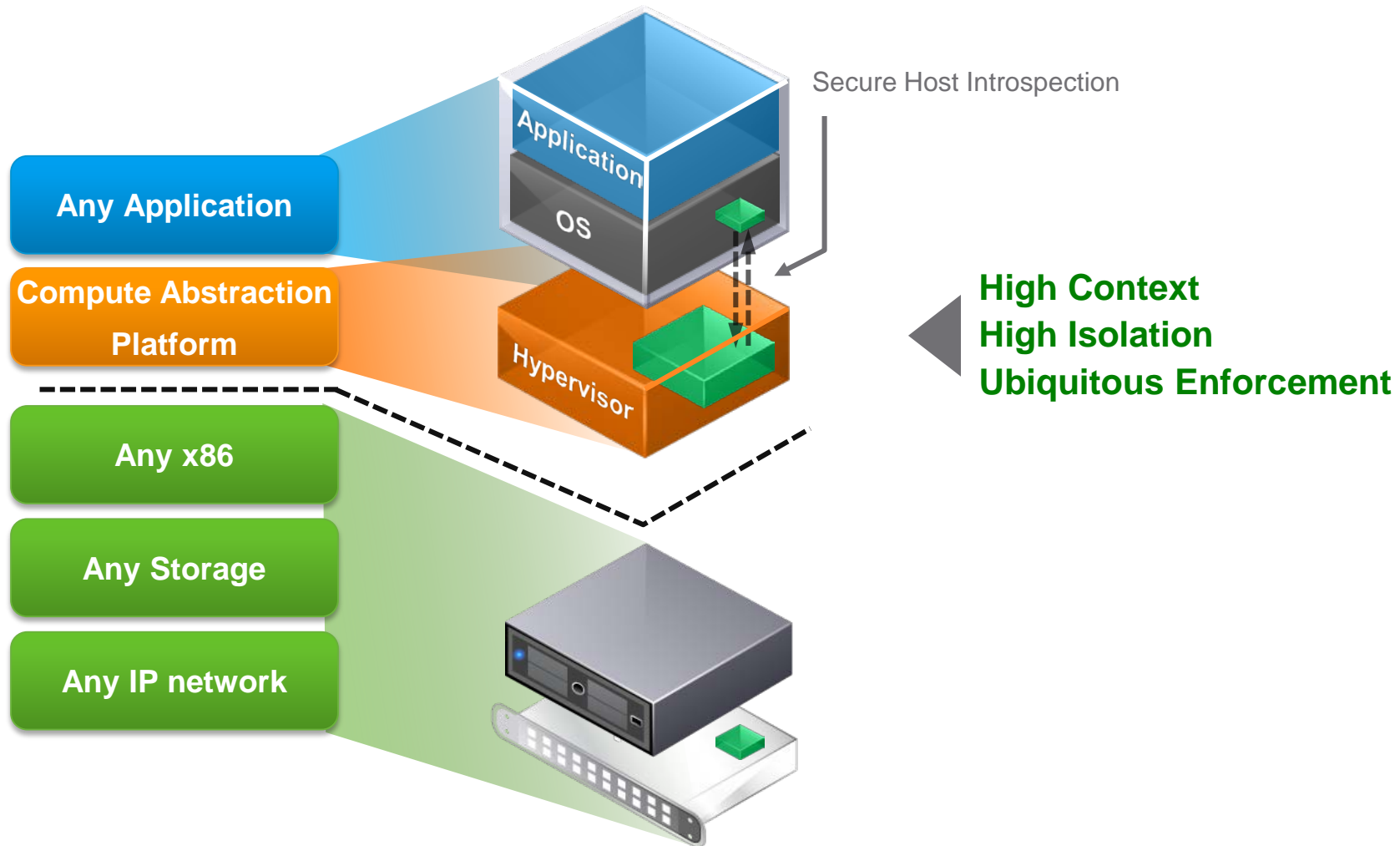
Traditional Approach

High Context
Low Isolation

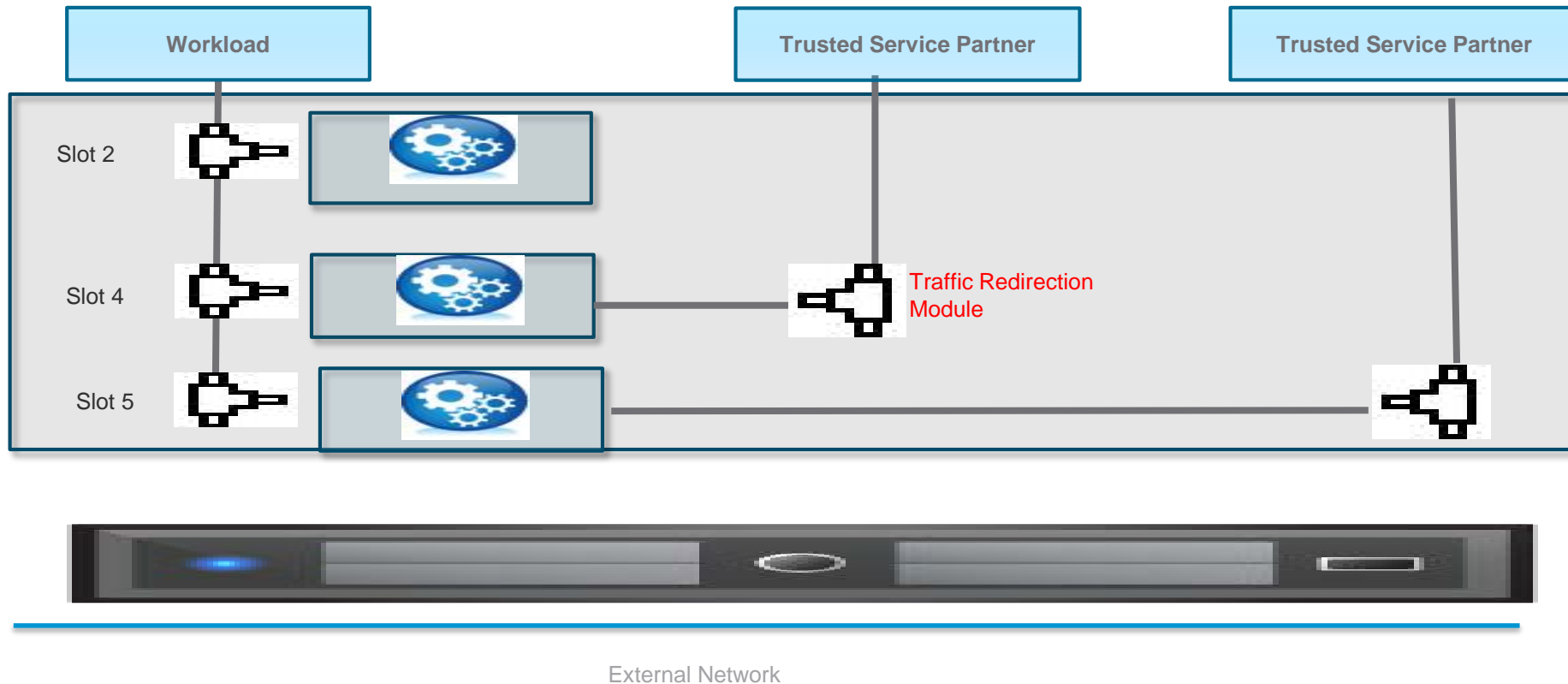
No Ubiquitous Enforcement

High Isolation
Low Context

We Need to Adapt Our Thinking to Leverage the Distributed Reality



Trusted Service Insertion to Go Beyond a Firewall



Trusted Service Insertion's Role in a CYBER-Resilient Infrastructure

Security Group = **Quarantine Zone**

Members = {Tag = 'ANTI_VIRUS.VirusFound', L2 Isolated Network}

Security Group = **EGS Mission "A"**

Policy Definition

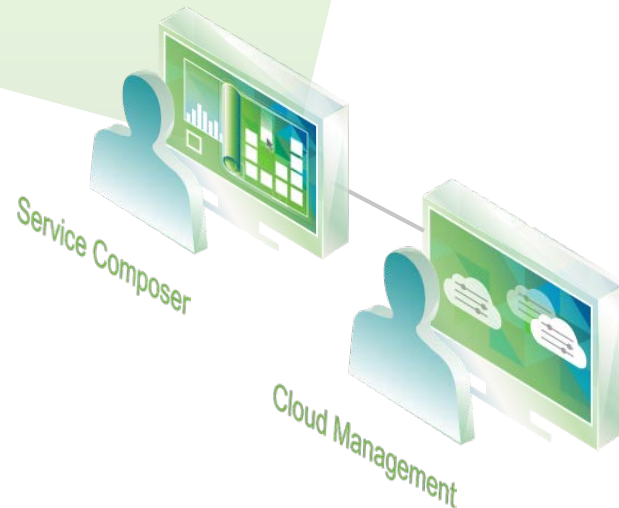
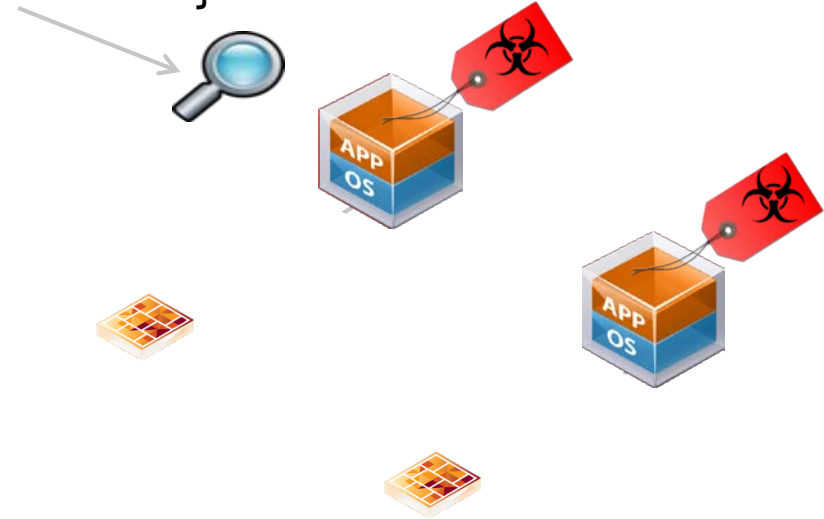
Standard VM Policy

- Anti-Virus – Scan



Quarantined VM Policy

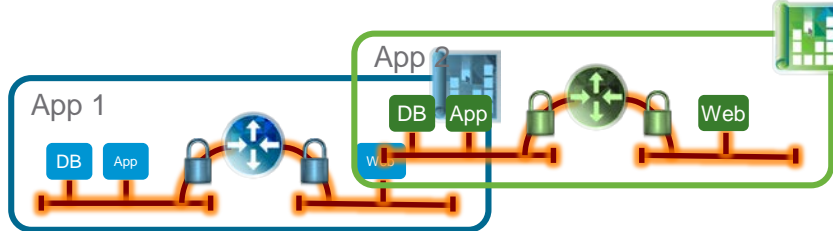
- Firewall – Block all except security tools
- Anti-Virus – Scan and remediate



Leveraging the Inherent Value of Distribution

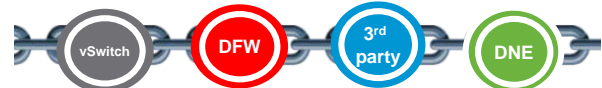
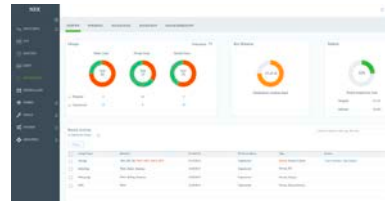
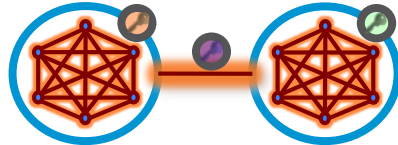
Confidentiality, Integrity, Authenticity

...for east/west traffic, applied to micro-segments



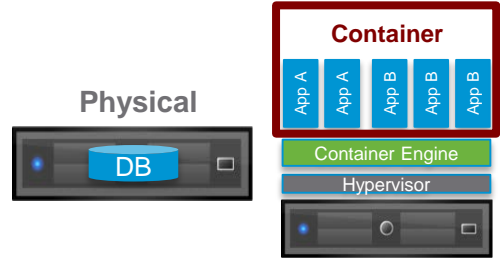
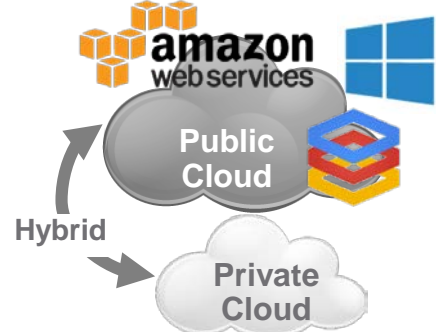
Operational Simplicity

...key management, service insertion, user experience

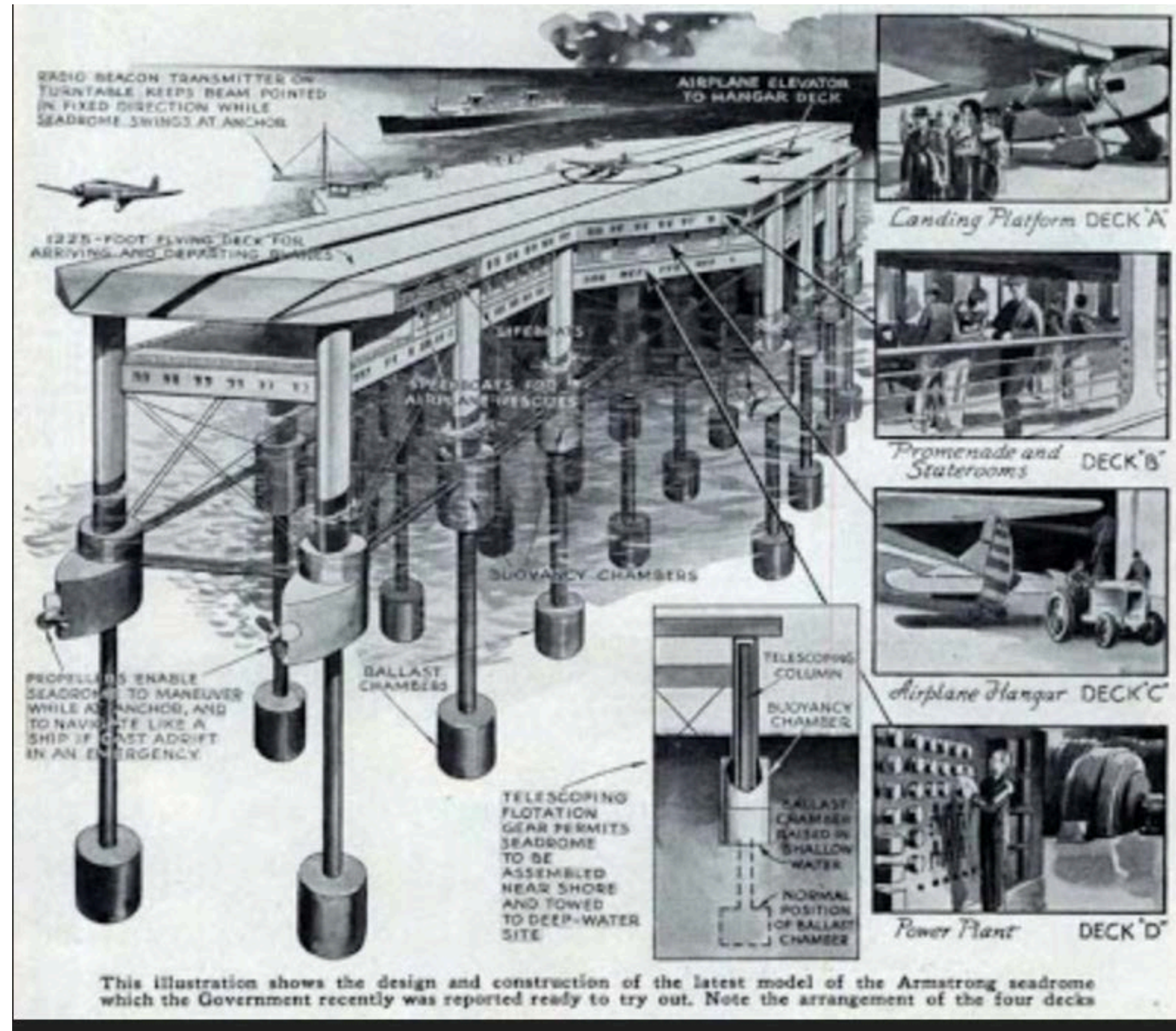


Any application topology

...private/public clouds, physical, containers



The Velocity of Change...



Thank You

