

# Infrastructure as a Service: Cloudy, or just plain hot air?

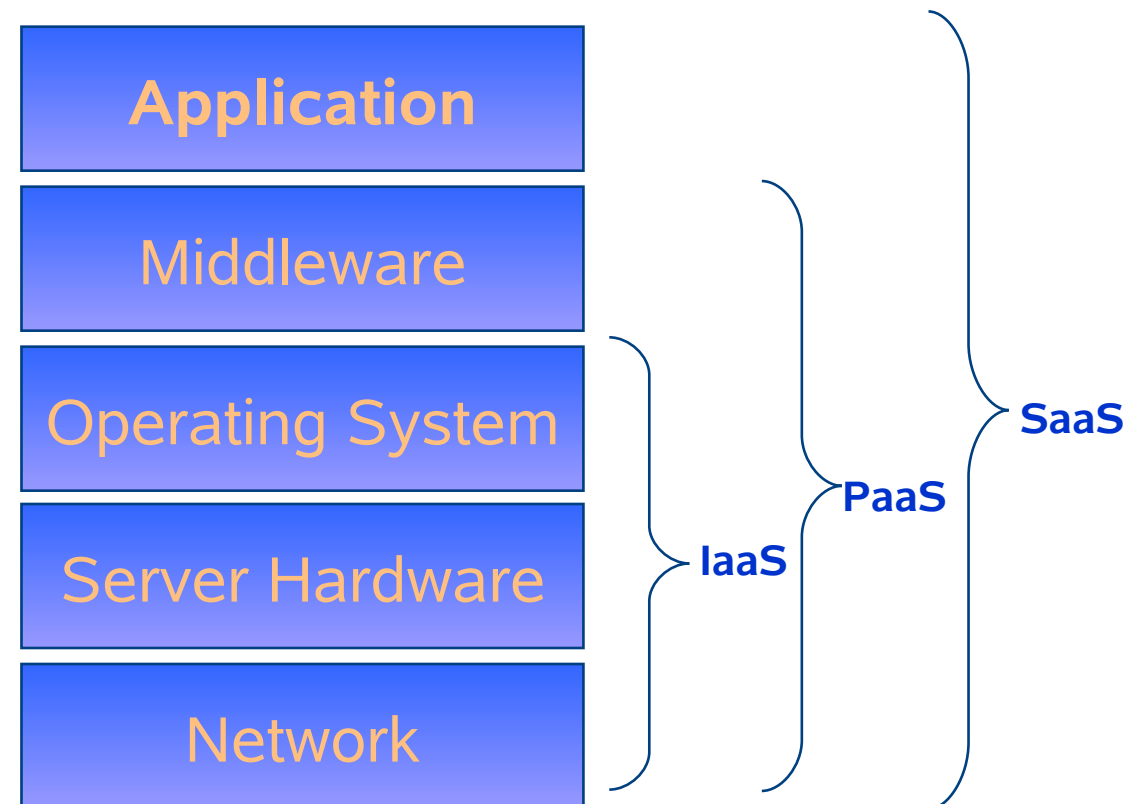
- Tony Lucas – Founder & Director
- Flexiant Ltd
- UKNOF17, September 2010

# Background

- **Hosting websites and infrastructure since 1997 as XCalibre**
- **Developing IaaS/Cloud software since 2004**
- **Launched Europe's first (and the world's second) IaaS platform: FlexiScale in 2007**
- **Developed Infrastructure as a service software: Extility**
- **Span off FlexiScale and its IP into Flexiant in December 2009**

# Key Areas

- **SaaS**
  - Software rather than an Application
- **PaaS**
  - Platform rather than installed Middleware
- **IaaS**
  - Infrastructure rather than physical hardware



# Extility

- Complete software stack to provide Infrastructure as a Service
- Server/VM/Network/Storage Management
- Admin and Customer Self Service UI
- Complete Billing Platform
- Licensable on a per core basis

# So why did we build it?

- Buying
- Up front Capex
- Extended provisioning
  - Purchasing hardware (1 week)
  - Delivery (2 weeks)
  - Installing Equipment (1 day)
  - Installing Applications (1-5 days)
  - Configuration & Testing (1-5 days)
  - Total: 4-6 weeks (minimum)

# Traditional Infrastructure

- Ongoing issues
  - Underutilisation
    - Typically 10-15% utilisation
    - If for office hours use, only used for 23% of the month
    - Overall only 4% utilisation!
    - All that power wasted!
  - Hardware redundancy
    - Redundant configurations or spare hardware
  - Maintenance requirements
    - Costly out of hours hardware or software maintenance for upgrades and fault fixing may be required.
    - Our datacentres were in London/SE England
  - Fixed capacity/configuration
    - Complicated or impossible to reconfigure easily to other tasks

# Pain Points

- Hardware
- Power
- Provisioning
- Fault finding/downtime

# Infrastructure as a Service

- **Contend servers using virtualisation**
  - Improving power utilisation and CapEx ratios
- **Provision within minutes**
  - Eliminating provisioning overheads
- **Self service via Web Interface or API.**
  - Delegate control to customers
  - Integrates into existing back office systems.
- **Hardware/OS Separation**
  - In built hardware redundancy
  - Easy maintenance management
  - Forced downtime is eliminated
- **Redelegation of resources**
  - Trivial to redeploy resources to other requirements



- Questions?