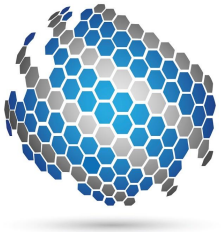


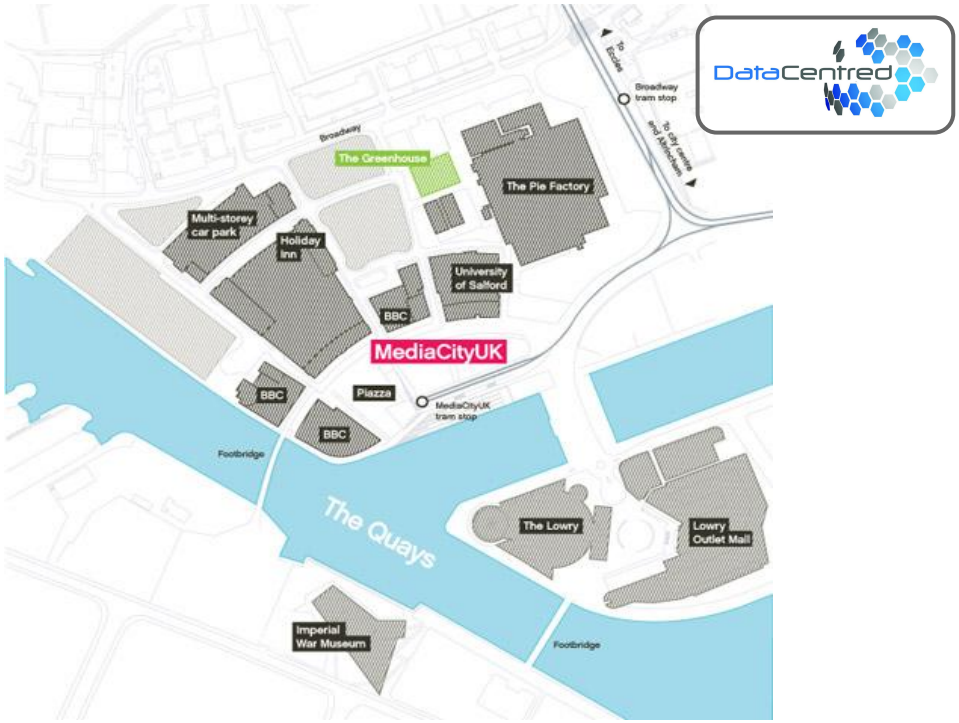
DataCentred

Building an Open Cloud

Matt Jarvis
Head of Cloud Computing

Michigan Park - MediaCityUK

At the heart of the UK's second major content hub

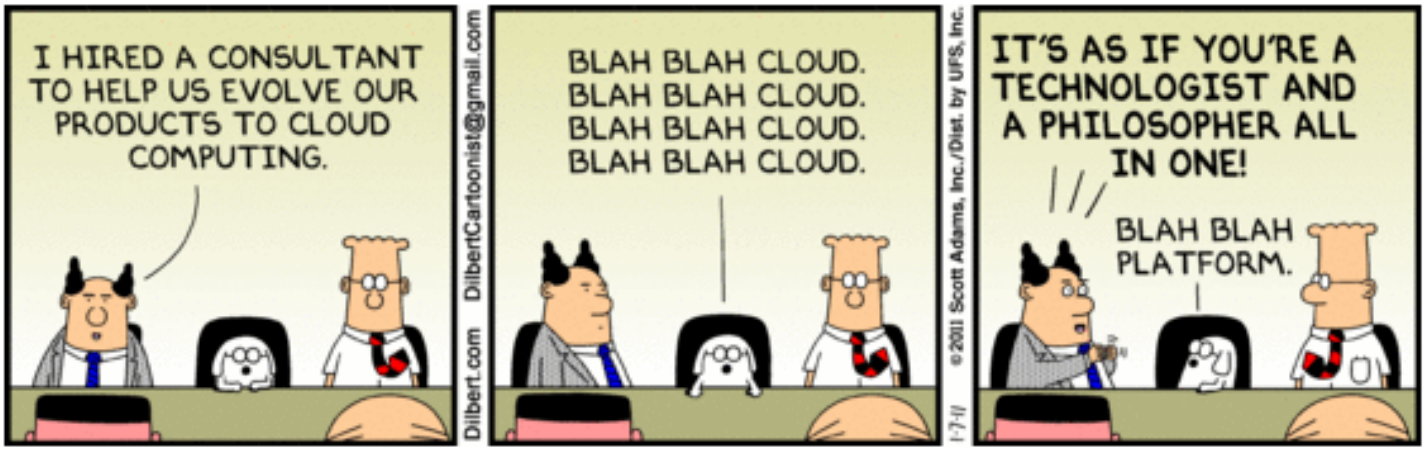


DataCentred

Fully operational 32,000 sq. ft. carrier-rich facility

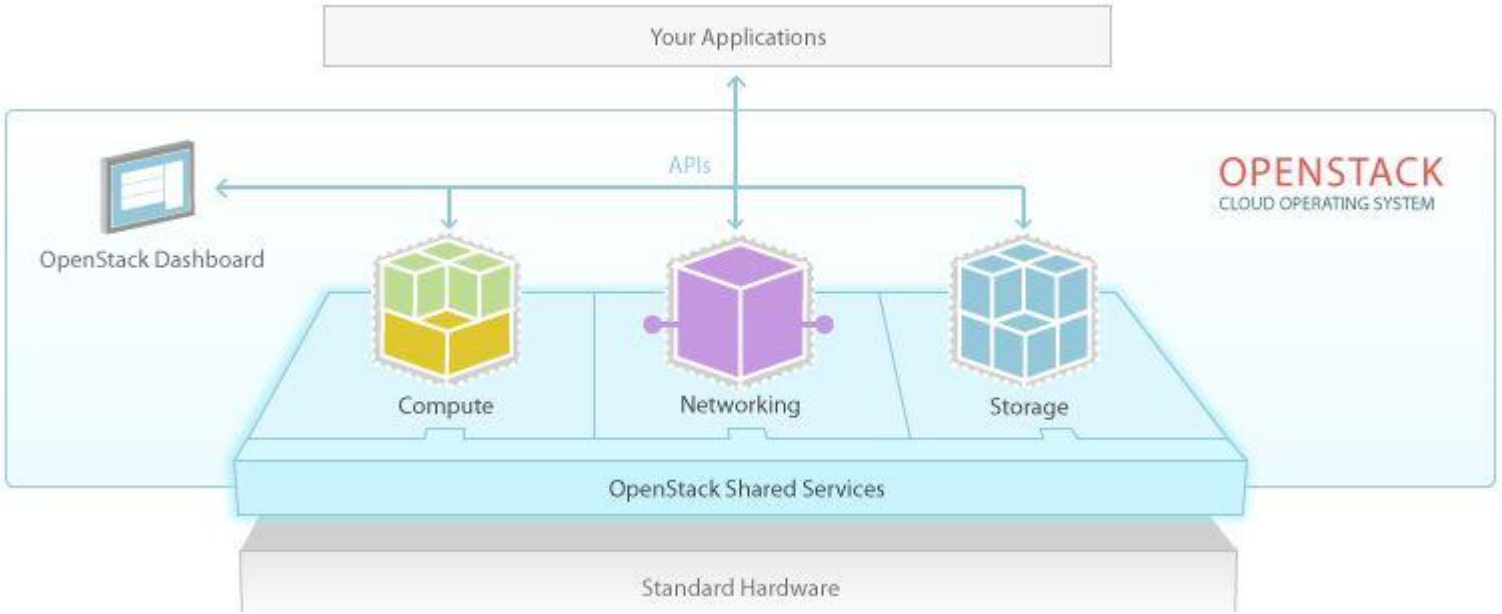
- 850 racks capacity
- 5 carriers with diverse fibre
- Two transformers delivering :
  - 6.6kV – 1250kVA (essential)
  - 6.6kV - 1000kVA (non- essential)
- 2 individual UPS systems
- 2 Standby 1250kVA generators
- 1 double skinned 9,600 litre fuel tank
- 19 x DX supplying computer rooms & plant

DataCentred



openstack™

DataCentred



Why Openstack ?

Open Source, Open Standards

easy to integrate and extend

Proven Technology

many large scale public and private clouds already using Openstack

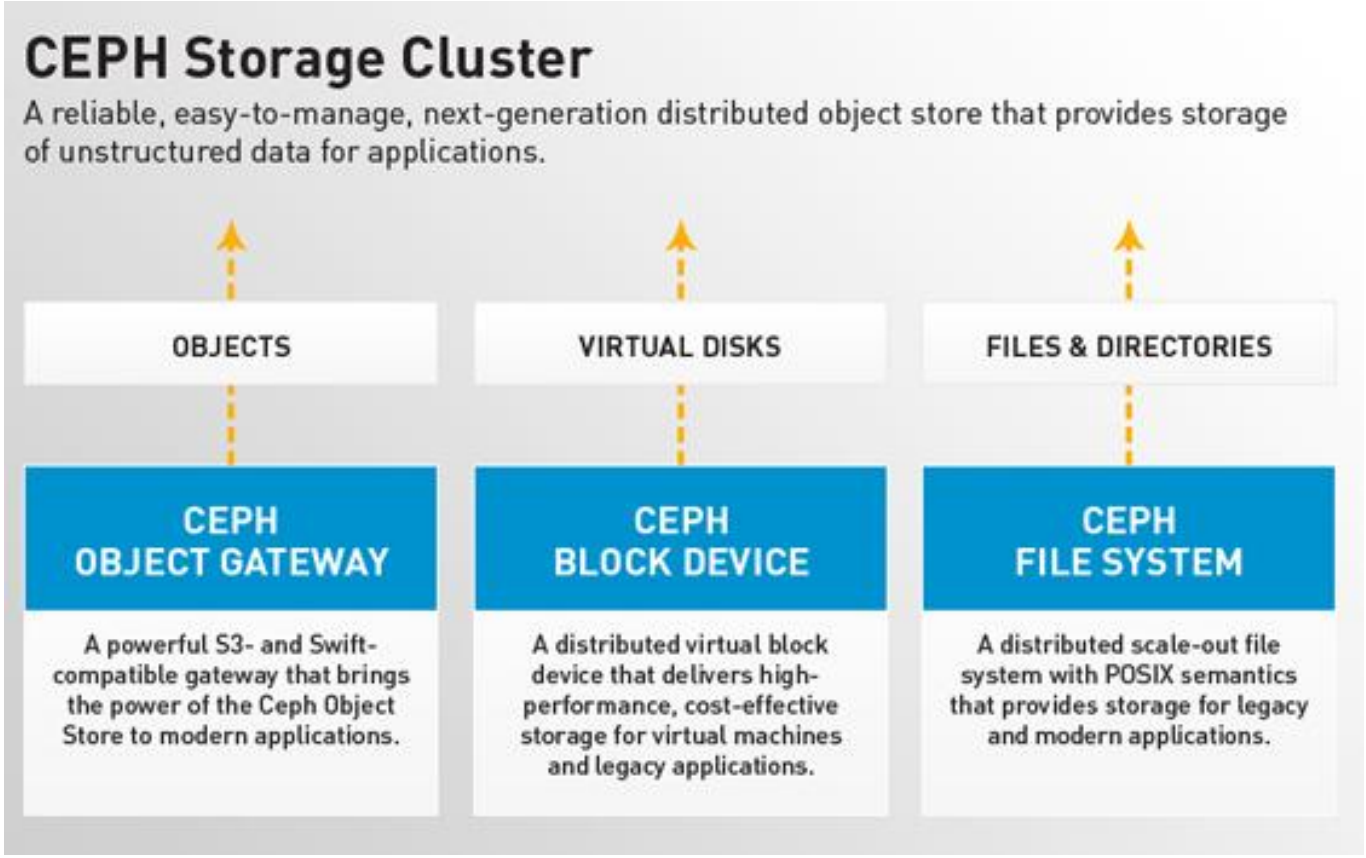
Active Development

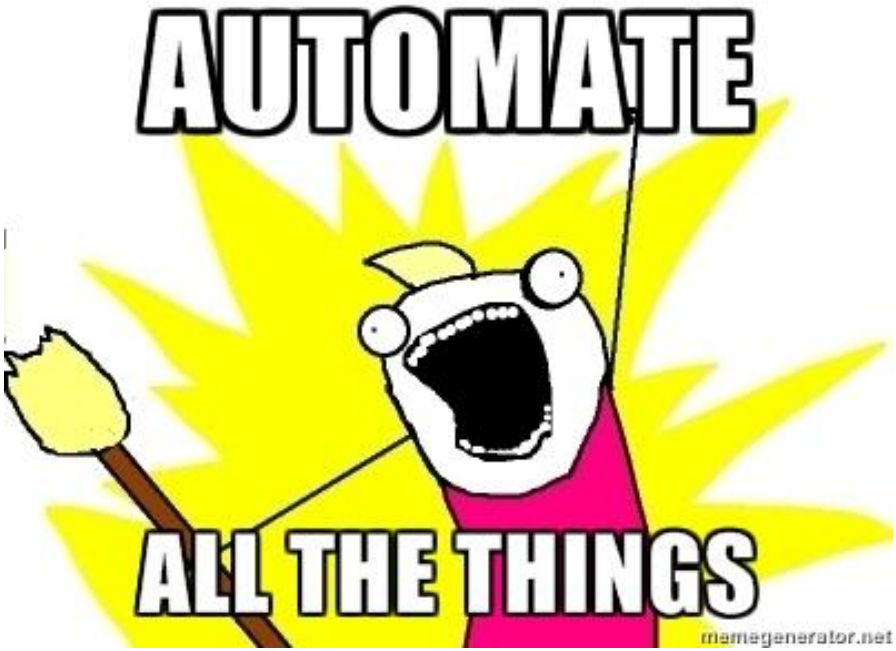
75+ technology companies contributing (Rackspace, RedHat, IBM and many more)

1000+ individual contributors

ceph

DataCentred





DataCentred

FOREMAN

puppet labs

Nagios®

ubuntu

- Provisioning
- Configuration Management
- Orchestration
- Logging and Monitoring

cacti

logstash

python™

MCOLLECTIVE

Infrastructure As Code

aka **We're All Developers Now**

- **Version Control**
- **Agile Development Process**
- **Lifecycle Management - Dev, Test, Production**
- **Continuous Test and Integration**

Compute Use Cases

DataCentred

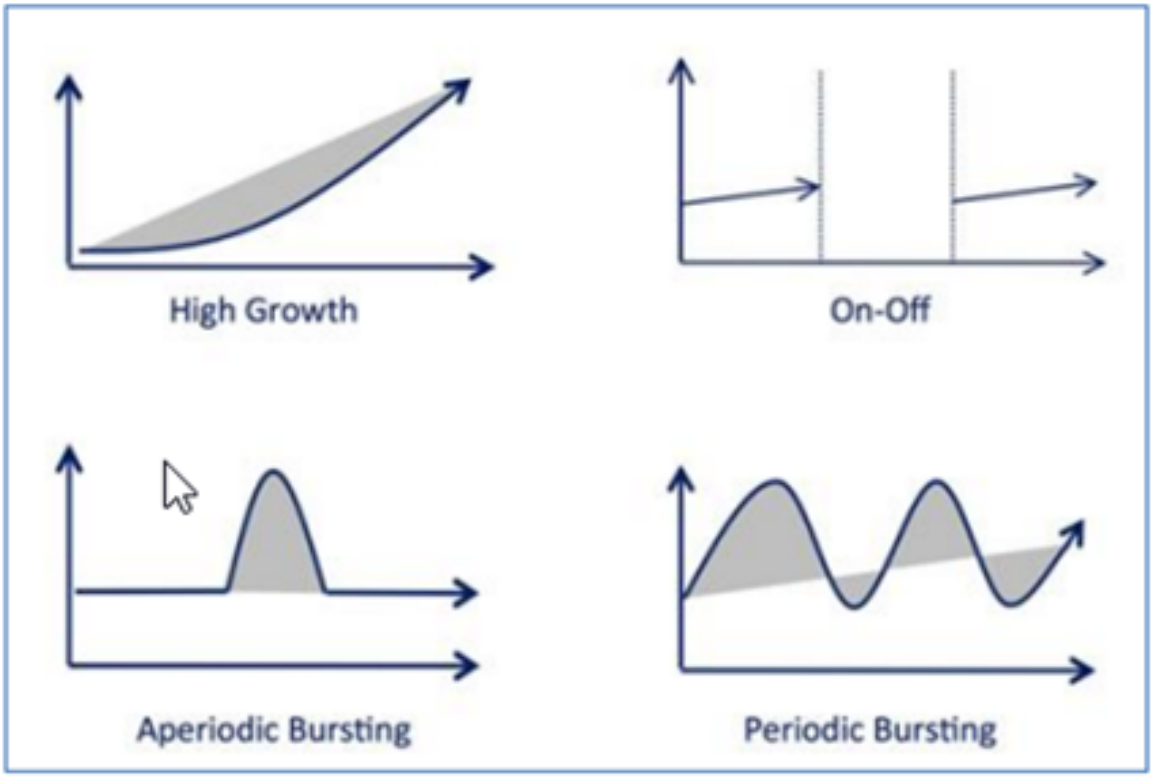
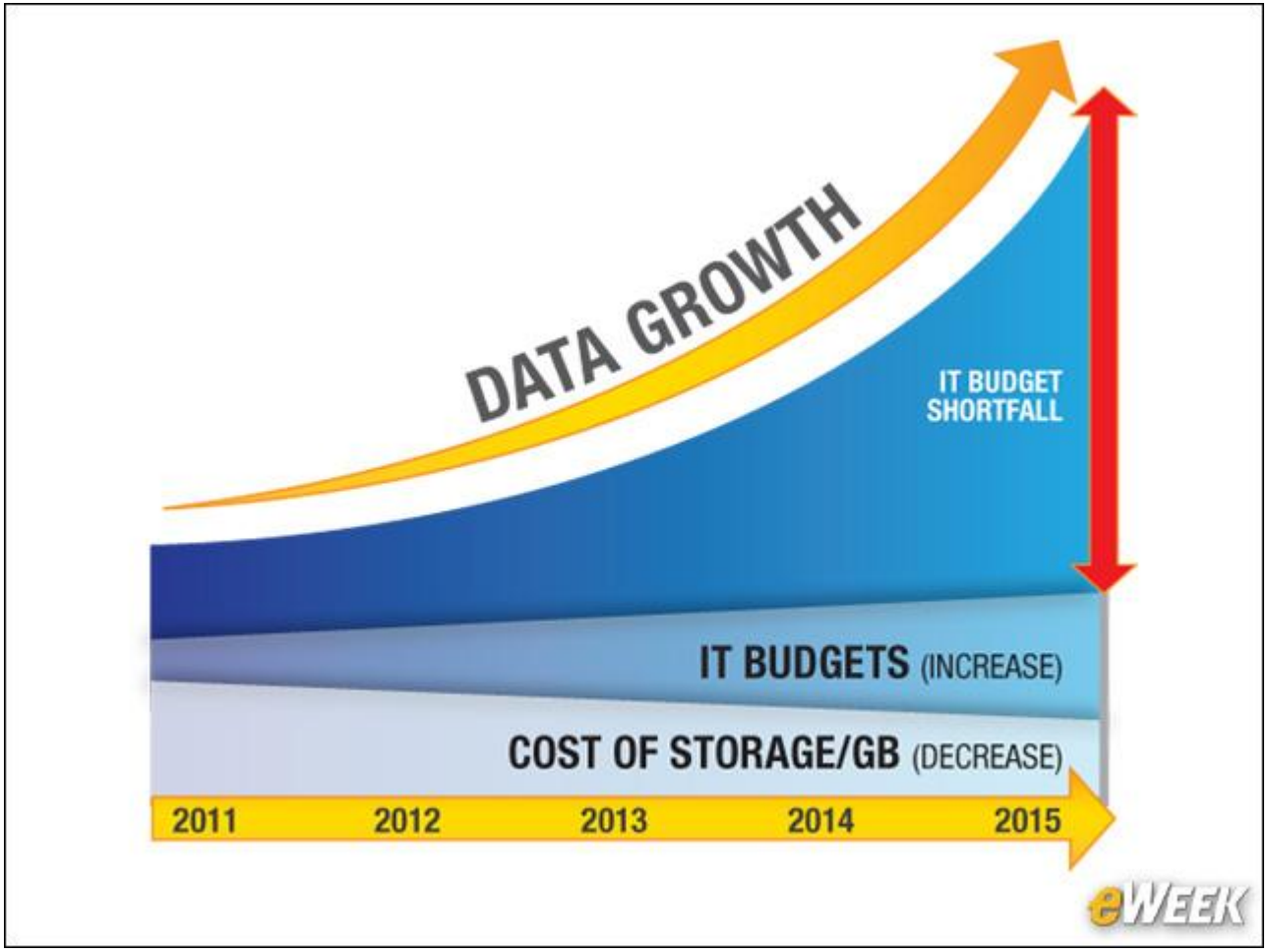


Figure 1 - Cloud Workload Types (Resource: www.cloudbook.net)

The Storage Problem

DataCentred



Thanks for Listening !