# Server Virtualization at CCP Games

James Wyld

**CCP Games, Virtual World Project Leader**

- CCP Infrastructure and Background
- Why go virtual?
- CCP’s goals with virtualizing
- Project Results
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# CCP Games Production Server Infrastructure

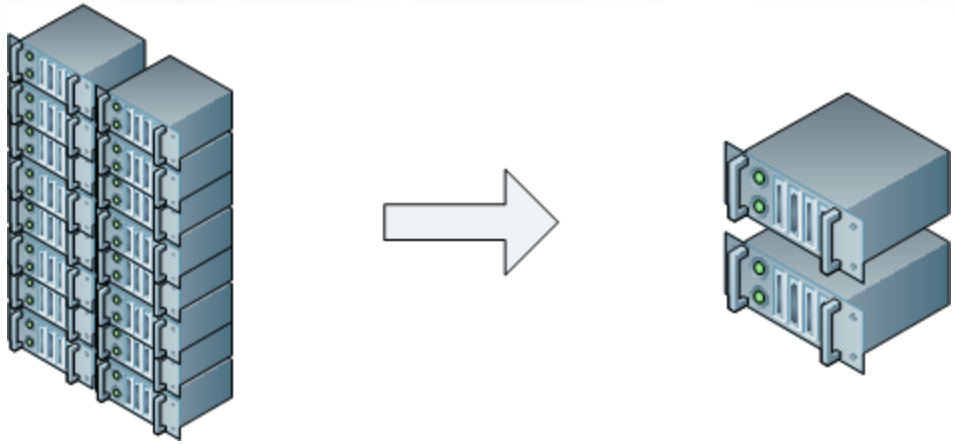
- Datacentre operations based in London.
- Remotely administered by a team in Iceland.
- Large number of blade servers running the primary application (EVE) – non virtual.
- Outdated EVE servers get new roles:
  - Web servers
  - Mail servers
  - Test servers
  - Antivirus/Windows Updates
  - Management

# Why go virtual?

- Older servers often consume the same / more power than their newer equivalents, with drastically lower performance.
- Many server roles do not come close to touching the performance capability of the host they run on – even for quite basic hardware.
- Current generation hardware makes it very cost-effective to virtualize.
- Less time spent on physical maintenance, as there is less to maintain.

# CCP's Goals

- Reduce overall sprawl of management and utility servers.
- Consolidate "idle" servers into an easy to maintain, highly available platform.
- Free up rack space.
- Reduce power consumption.

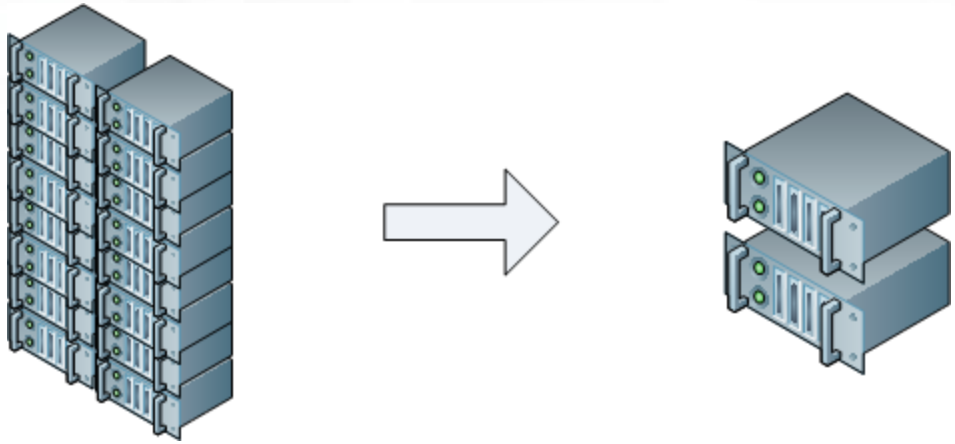


# Beware!

- Capacity planning:
  - Ensure the VM hosts have enough resources for full workload.
  - Understand performance requirements of your own applications.
- Stability of the system:
  - Individually, our VM's are non critical servers.
  - Collectively, the virtualized system is critical due to the number of servers.

# Project Results

- Massive reductions in space and power consumption.
  - 20 -> 2 physical servers.
  - ~4,000 w -> 400 w power.
- Scalable, flexible platform.
- Simple management of underlying infrastructure.
- Extremely fast provisioning of new servers.
- Happy Server Administration team!




Questions?