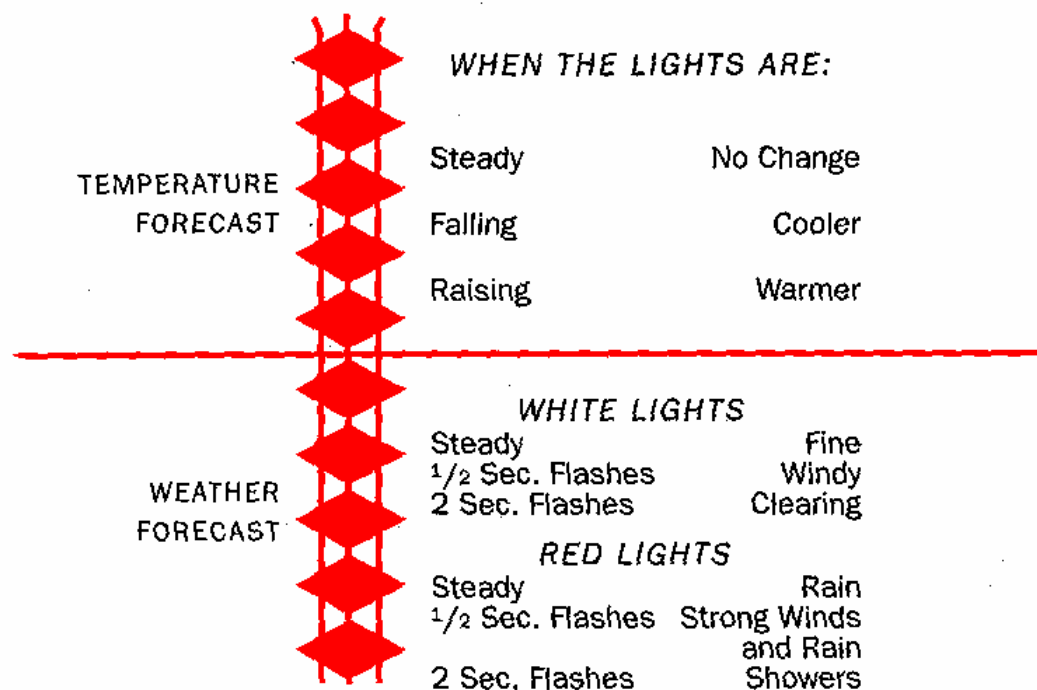


Weather Beacon



The forecasts come from the Weather Bureau
by remote control and are set at 6am,
Noon, 4.30pm and 10pm

TagmaStore
Network Storage Controller

Virtualisation - What is it?

Jeff Smith
Systems Consultant
Hitachi Data Systems



Agenda

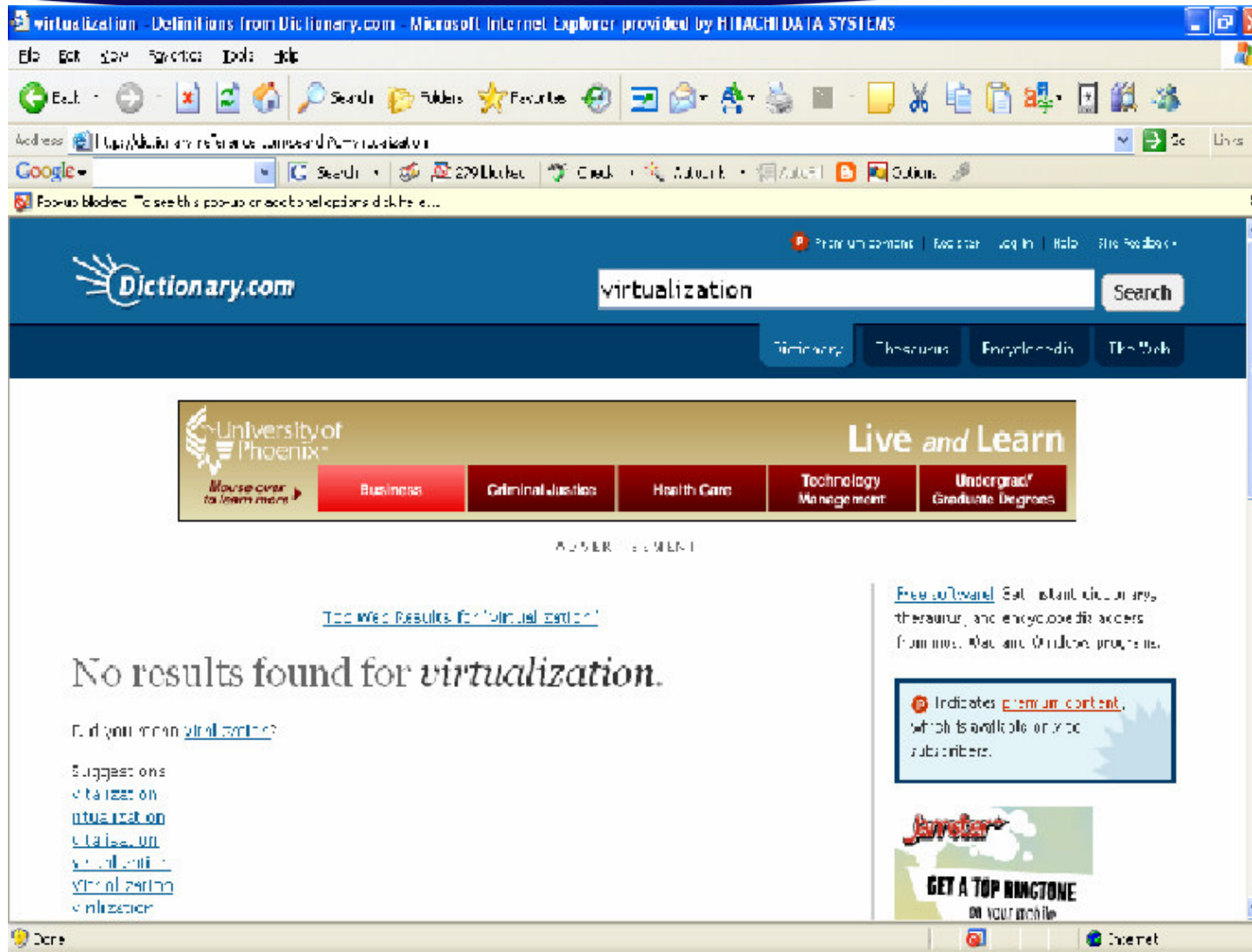
What is Virtualisation?

Why Virtualise?

Types of Virtualisation

Questions

What is Virtualisation? - Dictionary



Virtualisation - A Definition

In computing, **virtualization** is the process of presenting a logical grouping or subset of computing resources so that they can be accessed in ways that give benefits over the original configuration. This new *virtual* view of the resources is not restricted by the implementation, geographic location or the physical configuration of underlying resources. Commonly virtualized resources include computing power and data storage.

From Wikipedia, the free encyclopedia

<http://en.wikipedia.org/wiki/Virtualization>

Why Virtualise?

- Maximise use of resources
- Simplify Management
- Reduce Physical Infrastructure
- Simplify Disaster Recovery
- Reduce Cost
- Improve Flexibility and Responsiveness



Types of Virtualisation

- Server/OS Virtualisation
- Fabric/Network Virtualisation
- Storage Virtualisation



Server/OS Virtualisation

- Logical Volume Managers (LVM, VxVM)
- Logical Partitioning (IBM PRISM, HP VPARS, SUN Domains)
- Virtual Clients (VMWare, z/VM, MS Virtual Server)
- Application Virtualisation (Citrix)



Fabric/Network Virtualisation

- Virtual Local Area Networks (VLAN)
- Virtual Storage Area Networks (VSAN)
- In-Switch Virtualisation (Blade Virtualisation)
- In-Band Virtualisation (IBM SVC, FalconStor)
- Port Virtualisation



Storage Virtualisation

- Virtual Storage Ports/Host Storage Domains/LUNs/RAID
- Storage Array based virtualisation (HDS TagmaStore USP/Network Storage Controller – Tiered Storage)
- Tape Library Partitioning (SUN StoTek ACSLS, Quantum Prism)
- Virtual Tape Libraries (Quantum DX30/100, Diligent ProtecTIER, FalconStor, IBM VTS, SUN StoTek VSM)



Summary

- Many different kinds of Virtualisation
- Virtualisation offers significant opportunities to simplify, consolidate and enhance management of complex environments
- Plan implementation carefully with upfront consideration for growth/uptake and DR implications



Virtualisation – What is it?

Questions



Thank you

