

Information Technology Services



Information Technology Services supports QUT's vision with leading information technology services in partnership with the QUT community.

Layer 7 Switch Deployment



David Richards
Senior Network Programmer, ITS

Daniel Storey
F5 Networks Australia

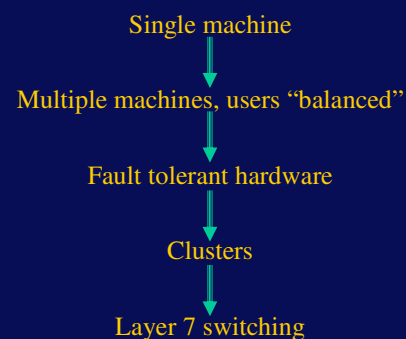
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NetAps Infrastructure Goals



1. To have highly available, fault tolerant applications
2. Simple
3. Minimal dependence between systems
4. Horizontal scalability
 - more capacity as required
 - all systems sharing the load equally or as determined (ie. Different class machines)
5. Seamless movement of applications
 - Service IP's

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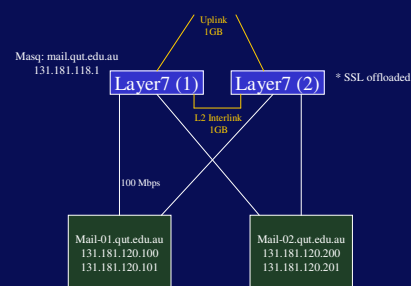
Clusters



- Tru64 Unix
- Primary node for network: congestion
- Single node for disk I/O (no longer)
- Tightly integrated node members
- Apache "see saw"
- Limited application availability for "cluster aware"
- Shared storage (SAN) has caused limited problems

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General layer 7 model: Single service, multiple machines



Pick fastest/least connections – masquerade outbound

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L7: Where the model can apply

- Where you don't need clusters!
 - Databases: Oracle
- User can hit any machine, or maintain a session to a single machine
- No high throughput shared storage required.
 - Low throughput via NFS/SMB
- Different class machines, or heterogeneous machines even

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Other services we know work

- Web: http and https + SSL offloading
 - Proxies too
- LDAP
- SMTP (in/out), POP, IMAP
- Radius
- Misc ports (tcp/udp)
- Cold fusion (cluster cats)

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Plans

- SMTPs/POPs/IMAPs with SSL offloading
- Higher level packet inspection and switching, URL based
 - Remove the apache/tomcat connector
- Advanced service monitoring, not if TCP port there or SMTP banner correct, but if actually providing real service
- Investigate full site fail over (3DNS)

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About the F5 BigIP

- Works brilliantly
- Failover is a dream
- Upgrade is easy
- Configuration is simple
- Provides a little too much flexibility, ie. Access to OS
- Very good support in Australia
- Market leader
- More from Daniel Storey, F5 Networks

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