Scaling Up the Registry Operations

APTLD Non-Technical Training – Bali
Monday February 26th 2007

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WHO IS AUSREGISTRY?

AusRegistry
- Registry Operator for the .au ccTLD since July 2002
- Operates .au Domain Name Servers (DNS)
- Consultation to industry and government
- Website: www.ausregistry.com.au

AusRegistry International
- Consults globally on ccTLD operations
- Registry Operator for the Solomon Islands .sb ccTLD
- Registry Operator for the Australian ENUM Trial
- Registry Operator for the REC Registry
- Website: www.ausregistryint.com
SCALABILITY

“... a desirable property of a system, a network or a process, which indicates its ability to either handle growing amounts of work in a graceful manner, or to be readily enlarged...”

Wikipedia
WHY BE SCALABLE?

- Registry Operators must take into consideration:
  - Growth
  - Policy
  - The Future
- Will you be able to meet your SLAs and the expectations of your stakeholders?..?
SCALABILITY – GROWTH

Growth:
- Increased registrations
- Cheaper pricing
- Increased population
- Stronger economy
SCALABILITY – POLICY

Policy:
- Less restrictive eligibility criteria
- Namespace opened up
  E.g. the ability to register domains in the second level
- New names introduced
SCALABILITY – THE FUTURE

The Future:
- New domain names (IDNs)
- New technologies
- Better infrastructure therefore accessibility to the internet
- Internet savvy generation
TECHNICAL CONSIDERATIONS

• Scale Up:
  • More power from bigger servers
  • Puts a lot of very critical eggs in one basket

OR…

• Scale Out:
  • Increased power from clustering
  • Highly available
TECHNICAL CONSIDERATIONS

- Capacity planning:
  - Current trends
  - Modelling
  - ‘What if?’ scenarios
- If changes are required:
  - What is the time frame to deploy?
  - What is the cost of deployment?
  - Ensuring minimum disruption to stakeholders…
TECHNICAL CONSIDERATIONS

Personnel:
- Qualified technicians
- Specialised fields
- Key person redundancy
- Security and background checks
- Time to hire
- Training
SERVICE CONSIDERATIONS

- Increased requirements:
  - Technical support
  - Administrative support
- Stakeholder education
- Marketing
- Stakeholder involvement:
  - Reviews
  - Consultation process
- Time…
OPERATIONAL CONSIDERATIONS

- Financial:
  - Cost vs. benefit
  - Requirements

- Legal:
  - Agreements
  - SLA’s

- Recruitment

- Documentation:
  - Manuals
  - Job descriptions