Managing a TLD Registry

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AusRegistry International

• Located in Melbourne, Australia
  – Involved in Domain Name Industry since 1999
  – Regional office in Dubai, UAE (planned for 2009)

• Domain Name Registry Services
  – Registry Systems & Software Provider
  – Consultancy Services

• Adrian Kinderis – CEO
  – ICANN GNSO Councilor
  – Member of new gTLD Working Group
Major Registry Projects

• Australia
  – .au Registry Services since 2002, under contract until 2014

• Registry Software & Consultancy Services
  – United Arab Emirates
    • ccTLD - .ae
    • IDN ccTLD - امارات
Managing a TLD Registry – Agenda

- What is a Registry?
- What does it take to set up a Registry?
- What does it take to manage a Registry?
- Budget considerations...
- Registry Software, buy vs. build?
- Challenges & opportunities...
- Q & A
What is a Registry?

• The terms that are used
**What is a Registry?**

<table>
<thead>
<tr>
<th>Registry</th>
<th>A Registry is the authoritative database of all domain names</th>
<th>The ‘Registry Operator’ keeps the master database and generates the zone file</th>
</tr>
</thead>
</table>

A Registry is the authoritative database of all domain names. The ‘Registry Operator’ keeps the master database and generates the zone file.
# What is a Registry?

## Registry Operator

| The entity that enters into Registry Agreement with ICANN | Responsible for setting up and maintaining the Registry |
What is a Registry?

Registry Services

- The receipt of data from Registrars
- Provide Registrars information relating to the zone servers
- Disseminate TLD zone files
- Operation of the Registry zone servers
What is a Registry?

<table>
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<th>Registry Services</th>
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<td>Disseminate domain name server registrations</td>
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</table>

Products or services that only a Registry Operator is capable of providing
What is a Registry?

- The Technical Function of Managing the Registry
Some Registry Examples – .info

domainname.info

Registrar

Registry

Afilias

ICANN
Some Registry Examples – .org

domainname.org

Registrar

Registry

Afilias

ICANN

PIR
Some Registry Examples – .au

domainname.com.au
What is a Registry?
What is a Registry?

• Registry Software
  – EPP Daemon
  – Whois Daemon
  – DNS Update Daemon
  – Registry Portal Web Application
  – Registry Database
  – EPP Toolkits
What is a Registry?

• Third Party Software
  – Database
  – Operating Systems
  – Monitoring
What is a Registry?

- Registry Hardware
  - Registry Servers
  - Whois Servers
  - EPP Servers
  - Load Balances, Fire Walls & Switches
  - Storage
  - Primary Nameservers
  - Secondary Nameservers

- Data Centres & Connectivity
What is a Registry?

- Human Capital
  - Board & Committees
  - Administration & Legal
  - Accounting Services & Marketing
  - Technical
    - Production Support
    - Registrar Support
    - Customer Support
    - Developers
What is a Registry?

• Escrow
• Compliance
  – Consensus Policy
  – Agreements
• Reporting
  – Service Availability Performance
  – Per-Registrar Activity Report
Are you... tiny?
Are you... small?
Are you... medium?
Are you... large?
Budget Considerations

• Security & redundancy
• Nameserver network
• Size of the TLD
• Technical staff
• Administrative staff
• Management staff
• Registry Software, buy vs. build?
Registry Software, buy vs. build?

• What are your Registry Software goals?
  – Be flexible for the future
  – Be able to grow with you
  – Take into consideration your requirements
  – Be compliant with standards

• Once you have your goals
  – Consider the risk of building
  – Conduct a review & prioritise requirements
  – Assess available solutions
  – Think about your time to market
Registry Software, buy vs. build?

Buy
- With no customisation
- With some flexibility
- Customised for you

Build
- From scratch
- Open source
Registry Software, buy vs. build?

- Finding the balance
Registry Software, buy vs. build?

- Building Registry Software takes
  - Planning
  - Commitment
  - Time
  - Expertise
  - Resources
Challenges

• Recruiting, rewarding & retaining staff
• Maintenance of the system
• Maintaining & complying with required service levels
• Keeping up to date
Opportunities

• New products & services
• Internationalised Domain Names
• DNSSEC
• New TLDs
Our Experiences

• After 9 years in the industry
  – Communicate with stakeholders
  – Share information & keep up to date
  – Participate
  – Build a good team
  – Draw on the experiences of others

• Get it right!