



Registry/Registrar Model – Part 1

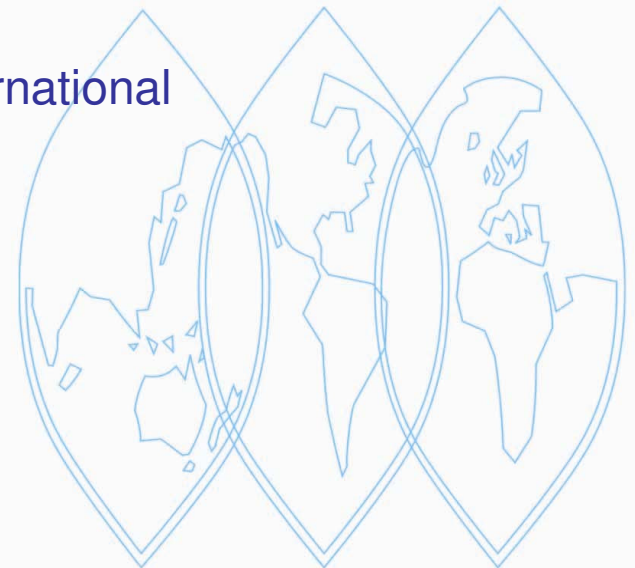
Registry/Registrar Model – Part 1

APTLD Non-Technical Training – Dubai

Tuesday June 5th 2007

Adrian Kinderis

Chief Executive Officer – AusRegistry International



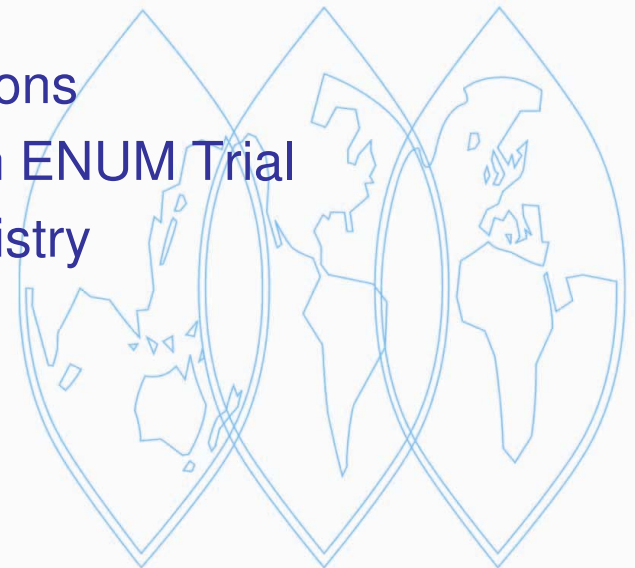
WHO IS AUSREGISTRY?

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 Australian ENUM Trial
- Registry Operator for the REC Registry
- Website: www.ausregistryint.com



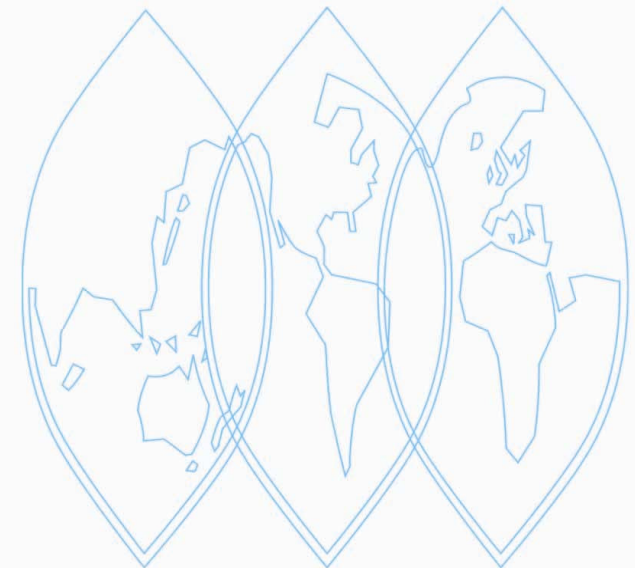
REGISTRY / REGISTRAR MODEL

“...people can have the Model T in any colour – so long as it's black...”

Henry Ford (1863 - 1947)

“...in theory, there is no difference between theory and practice; in practice, there is...”

Chuck Reid



REGISTRY / REGISTRAR MODEL

- Across the globe ccTLD administrations are the responsibility of:
 - Individuals
 - Academic Institutions
 - Government Agencies
 - Specialist NGOs
 - Commercial Entities
- These diverse entities and their varied management styles ensure there is no single model for a ccTLD



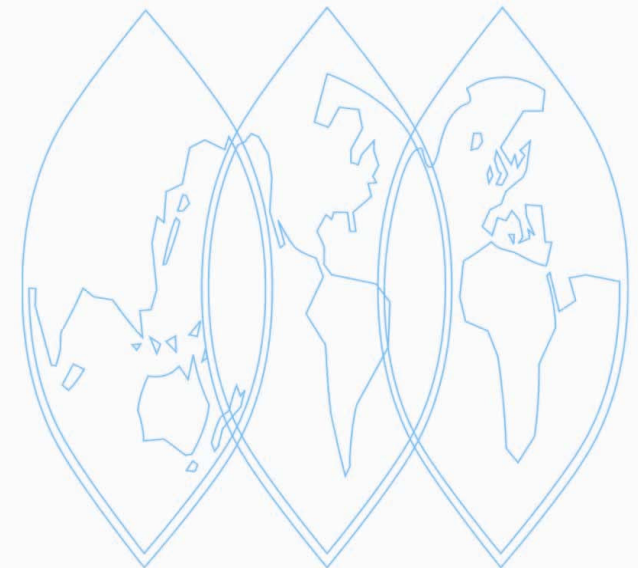
REGISTRY / REGISTRAR MODEL

- Initial allocation of responsibility for administration of ccTLDs was ad hoc
- There was the perception that domain names were primarily an academic interest
- Many ccTLDs were delegated to academic and government institutions – though there are notable exceptions



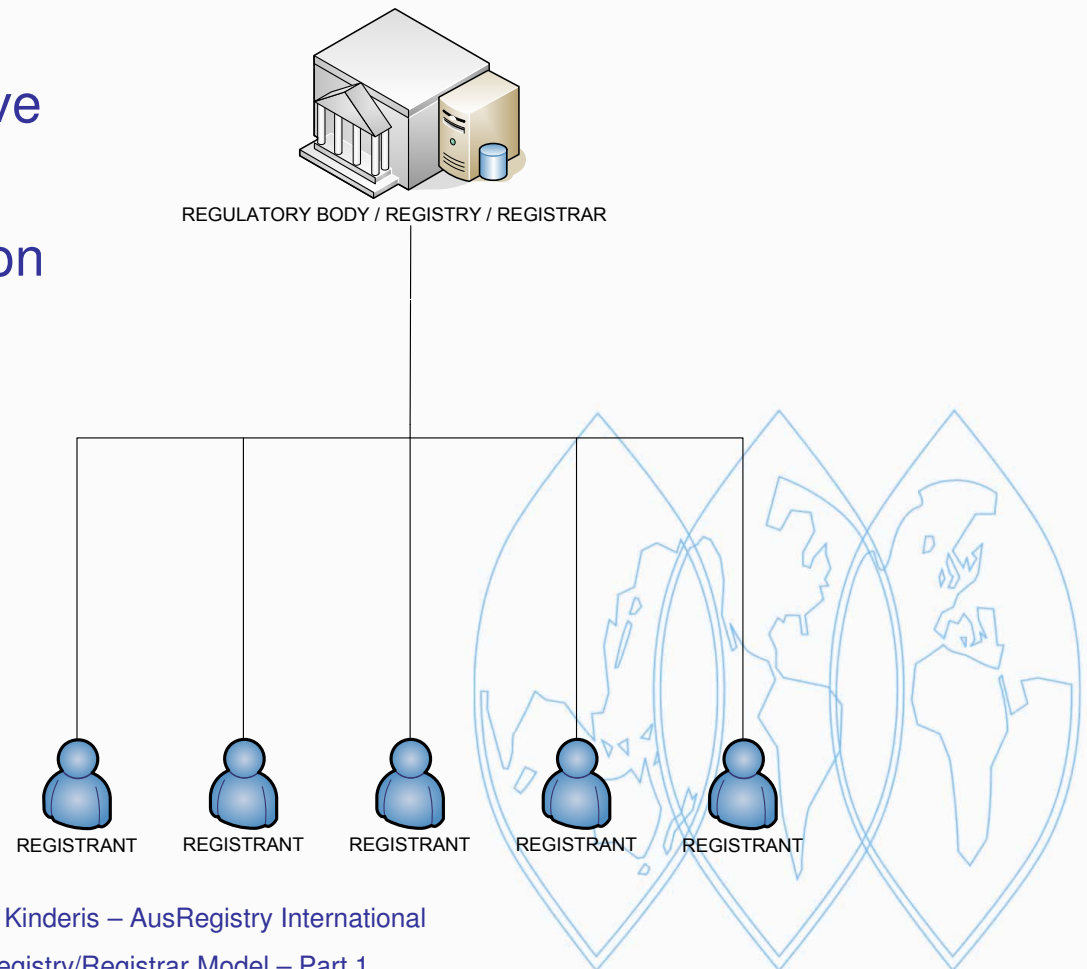
REGISTRY / REGISTRAR MODEL

- Governments are realising the critical nature of the Internet to national security, business and the local community
- IANA is responsible for the delegation of ccTLDs
- Redelegation and transition to new structures for a ccTLD can be time consuming and expensive



REGISTRY MODELS

- Regulatory Body, Registry and Registrar
- Performs:
 - Administrative
 - Technical
 - Retail function



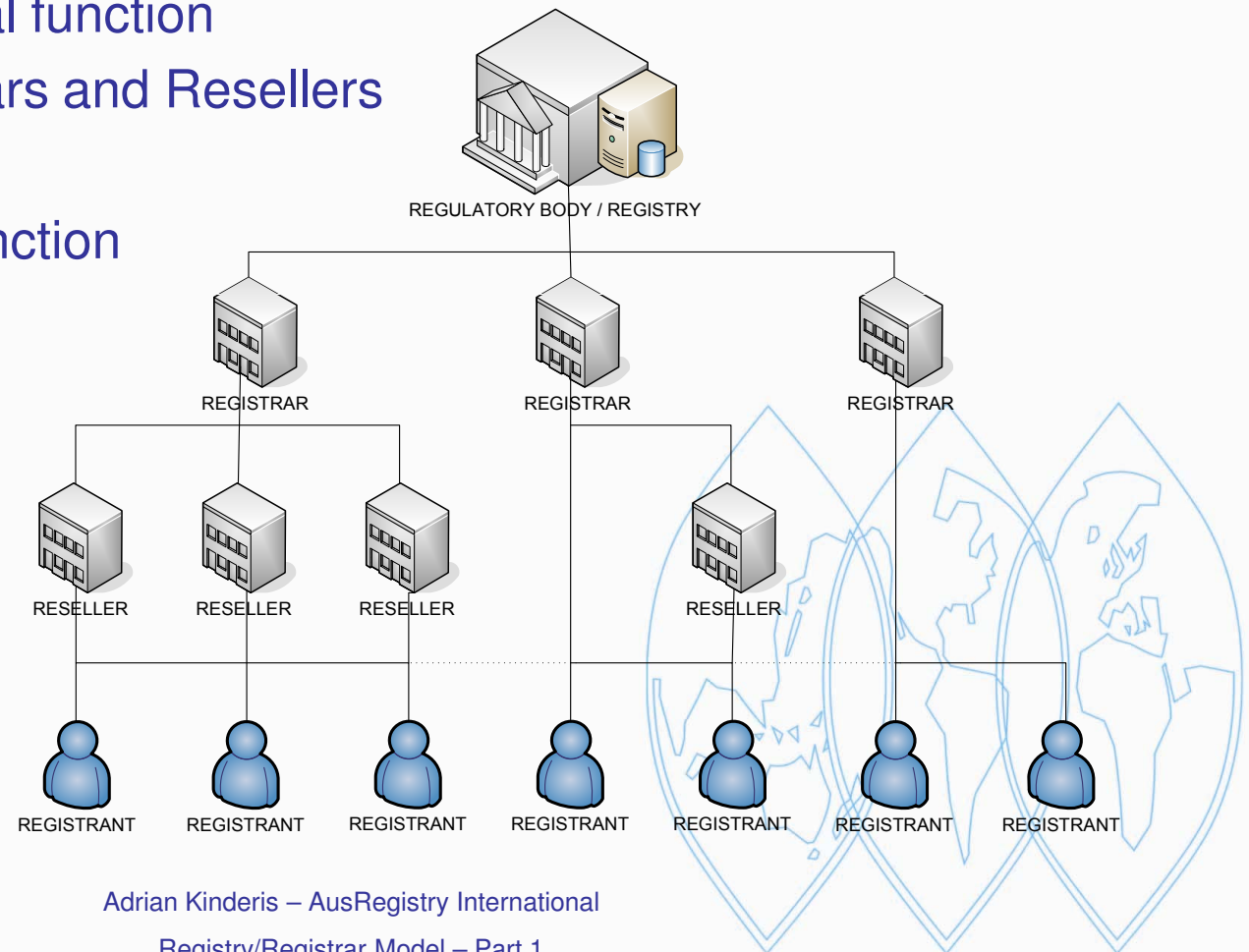
REGISTRY MODELS

- Pros:
 - Established as central authority
 - Less confusion in the market place
 - Suited to small or emerging markets
- Cons:
 - Lack of competition
 - Pricing structure
 - Registrant customer service
 - Larger staffing requirements for technical, retail and administrative functions
- Examples: .ae



REGISTRY MODELS

- Regulatory Body and Registry combined administrative and technical function
- Registrars and Resellers perform retail function



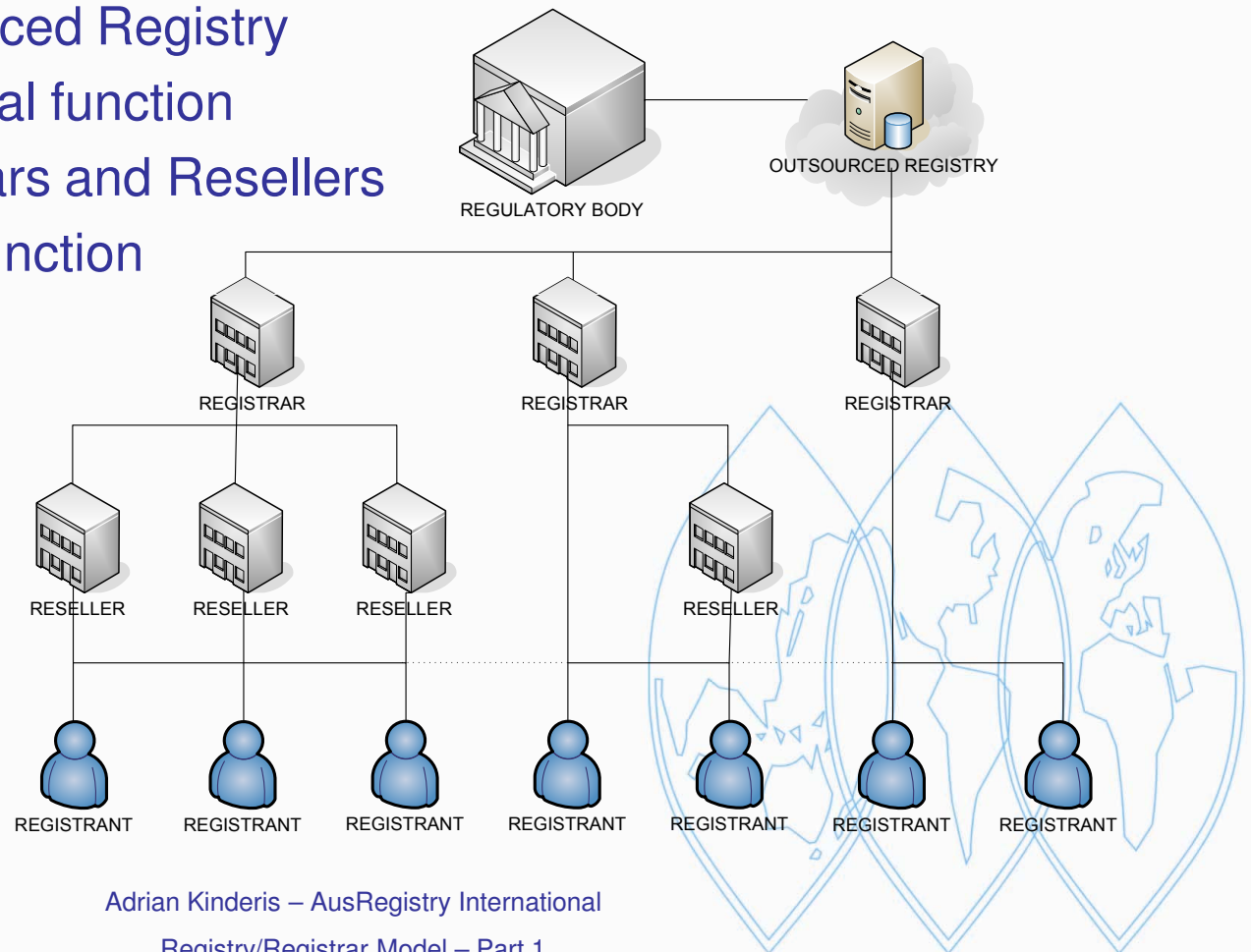
REGISTRY MODELS

- Pros:
 - Consistency of message, mission and vision
 - Able to approve and resolve issues efficiently
 - Competitive model
 - Pricing
 - Service
 - Accessibility
- Cons:
 - In-house technical requirement
 - Increased cost of administering Registrars and Resellers
- Examples: .ca



REGISTRY MODELS

- Regulatory Body administrative function
- Outsourced Registry Technical function
- Registrars and Resellers Retail function



REGISTRY MODELS

- Pros:
 - Expertise in individual fields
 - Shared responsibility and governance
 - Competitive model
 - Pricing
 - Service
 - Accessibility
- Cons:
 - Loss of control of technical functions
 - Costs associated with RFT process
 - Legal agreements
- Example: .au



THIN REGISTRY

- A thin Registry is one for which the Registry database contains only domain name service (DNS) information:
 - Domain name
 - Name server names and name server address
 - The name of the Registrar
 - Basic transaction data
- It does not contain any Registrant or contact information
- Registrant or contact information is maintained by the Registrar
- Examples: .com, .net, .org



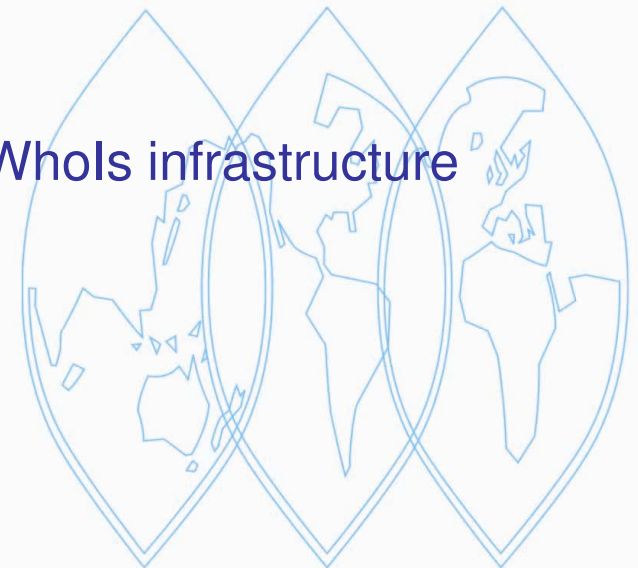
THICK REGISTRY

- A thick Registry is one for which the Registry database contains:
 - Registrant and contact information
 - Domain name
 - Name server names
 - Name server address
 - The name of the Registrar
 - Basic transaction data
- All authoritative information is kept within the Registry
- Examples: .info, .au, .ca



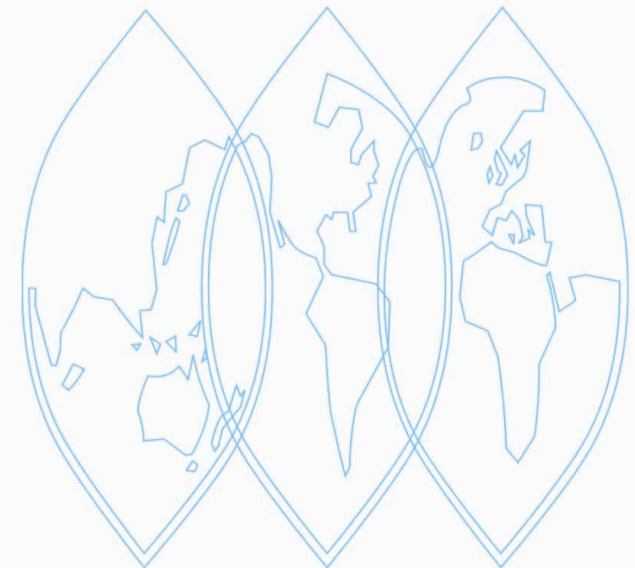
THICK vs. THIN

- Security of data held by Registrars
- Escrow concerns
- Centralised source of standardised WhoIs information
- Privacy and policy considerations
- Registrar resources maintaining a WhoIs infrastructure
- Streamlines the transfer process



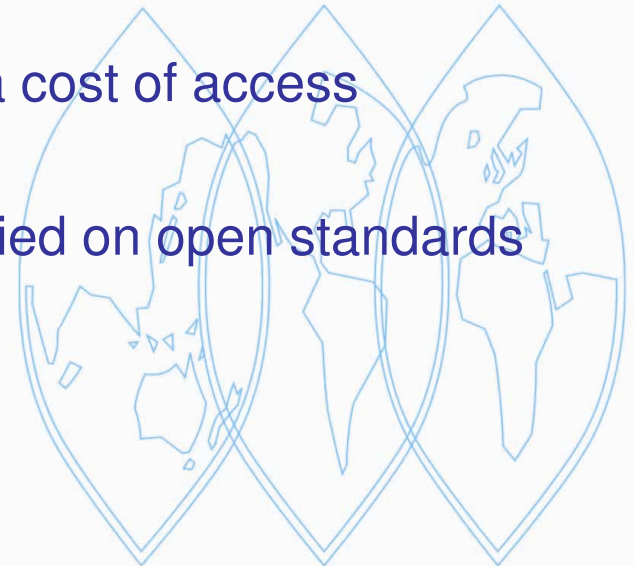
Registry/Registrar Model

- Outsourcing:
 - To outsource all or parts
 - Cost
 - Critical resource
 - Sovereignty
 - Security & Control
 - Service Levels
 - Maintenance
 - Time



WHY BE STANDARD?

- RFC 2026 – The goals of the Internet Standards Process are:
 - Technical excellence
 - Prior implementation and testing
 - Clear, concise, and easily understood documentation
 - Openness and fairness
 - Timeliness
- Proprietary technologies will have a cost of access
- Development of the internet has relied on open standards
 - TCP/IP
 - XML
 - Etc...



EXTENSIBLE PROVISIONING PROTOCOL – EPP

- A protocol for the registration and management of second and lower level domain names and associated name servers
- Specified in RFC's 4930, 4931, 4932, 4933, 4934, and 4935
- Fast, seamless and accurate exchange of information
- EPP is currently the most commonly used and accepted protocol for TLD Registries
- Allows Registries to adapt specific sections to meet local requirements



EXTENSIBLE PROVISIONING PROTOCOL – EPP

- Allows for Registrars to:
 - Draw on the experiences of others
 - Connect to multiple Registries without the expense of developing multiple solutions
- EPP allows separation of Registration events
 - Domain
 - Contact
 - Name server objects

