Registry Functions

Essential components for operating a ccTLD registry

ccTLD workshop
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ccTLD registry

- Not only about DNS
- Administrative entity with a technical role
- Tools (DNS, Whois, ...)
- Data (Contacts, Zones)
- Policy (methods, rules)
Functions of a Registry

T = technical data (zone content)
P = policy data (local community policies, IANA policies)
S = social data (contact info, billing data etc.)
Second Level Domains
Functions inside a Registry
Registration Process

- **Primary function**
  - interface to the client (registrar, registrant)

- **Secondary function**
  - Enforcement of local policies and regulations, e.g.
    - name valid and unique
    - registration number (if required by government etc.)
  - Billing information

- **Methods**: Web services, email client, EPP, Fax, phone etc.
Registry Data Store

- Internal data store
  - Archive of transactions
  - Maintains consistency between the blocks
  - Source for management information, statistics, billing etc.

- Internal social data
Whois Service

- Public/external data store
  - Classic: port 43
  - Via web interface
  - New: CRISP (RFC 3707)
- Implementation of local privacy rules
- Public social data
DNS Service

- DNS & BIND
- Authoritative DNS
- Primary/secondary
- Caching DNS as service (optional)
- Reverse DNS (pointer to RIR’s)
Technical Infrastructure

- Hardware
- Connectivity, Routing
- Operating System
- Editor, scripts
- Registration Tools
Registry: architecture
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