

Registry Functions

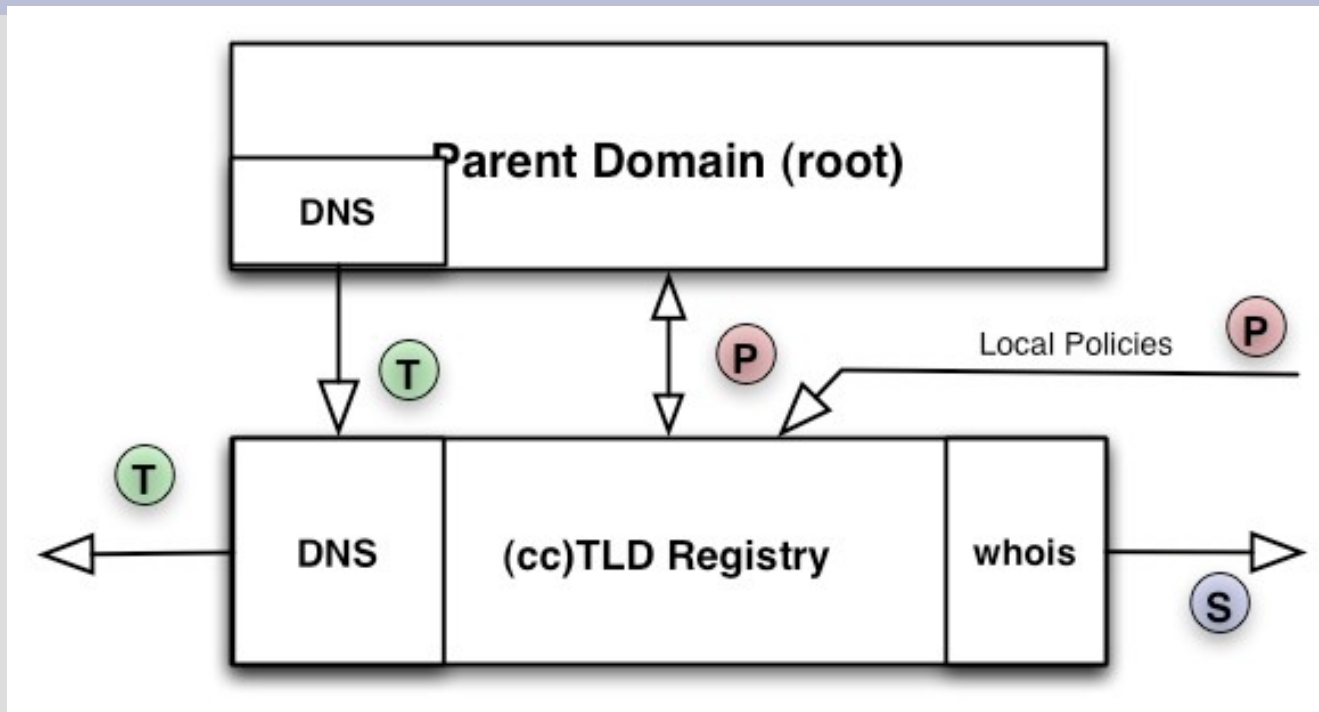
Essential components for
operating a ccTLD registry

ccTLD workshop
November 26-29 2007
Amman, Jordan

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

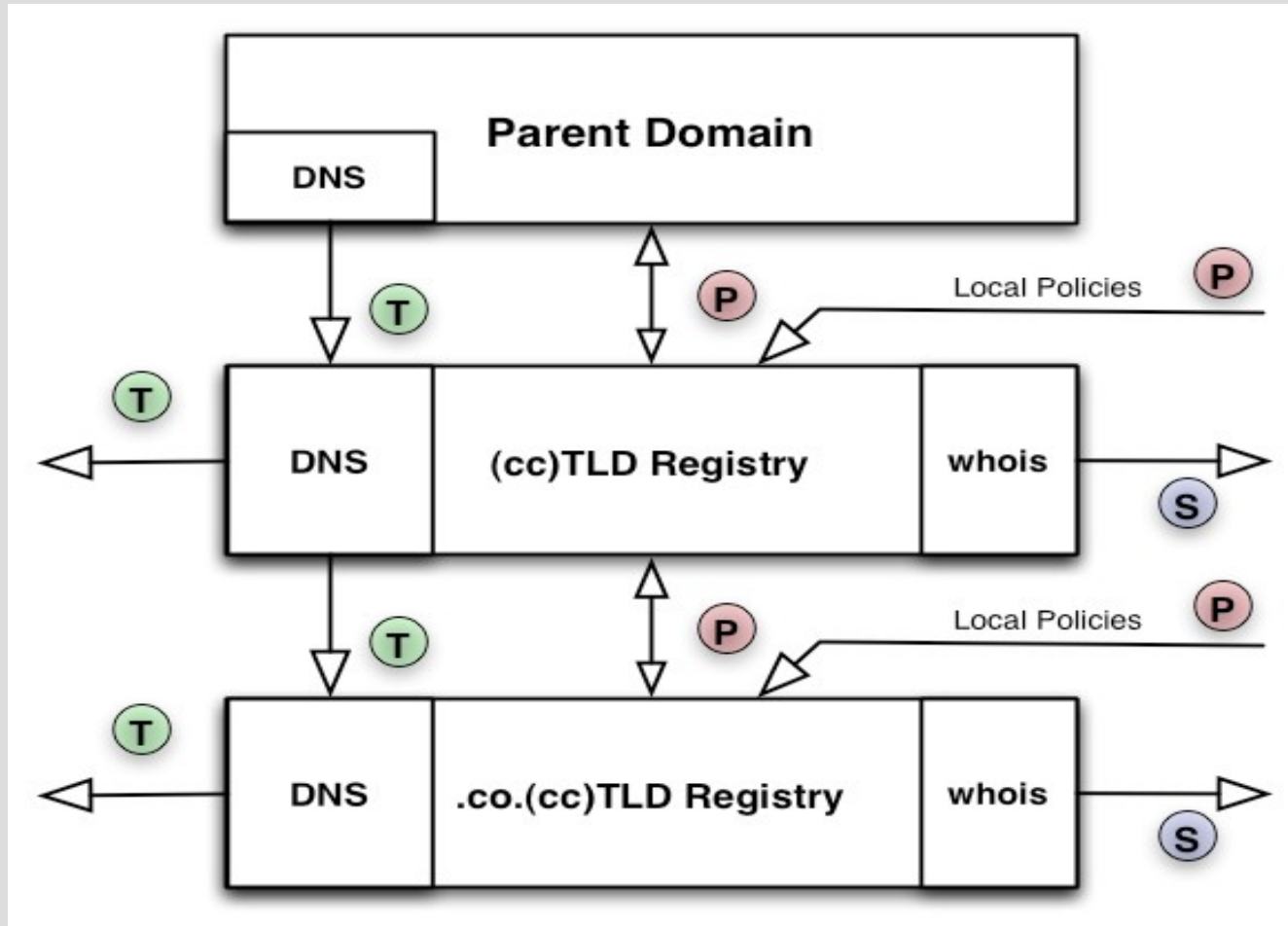


T = technical data (zone content)

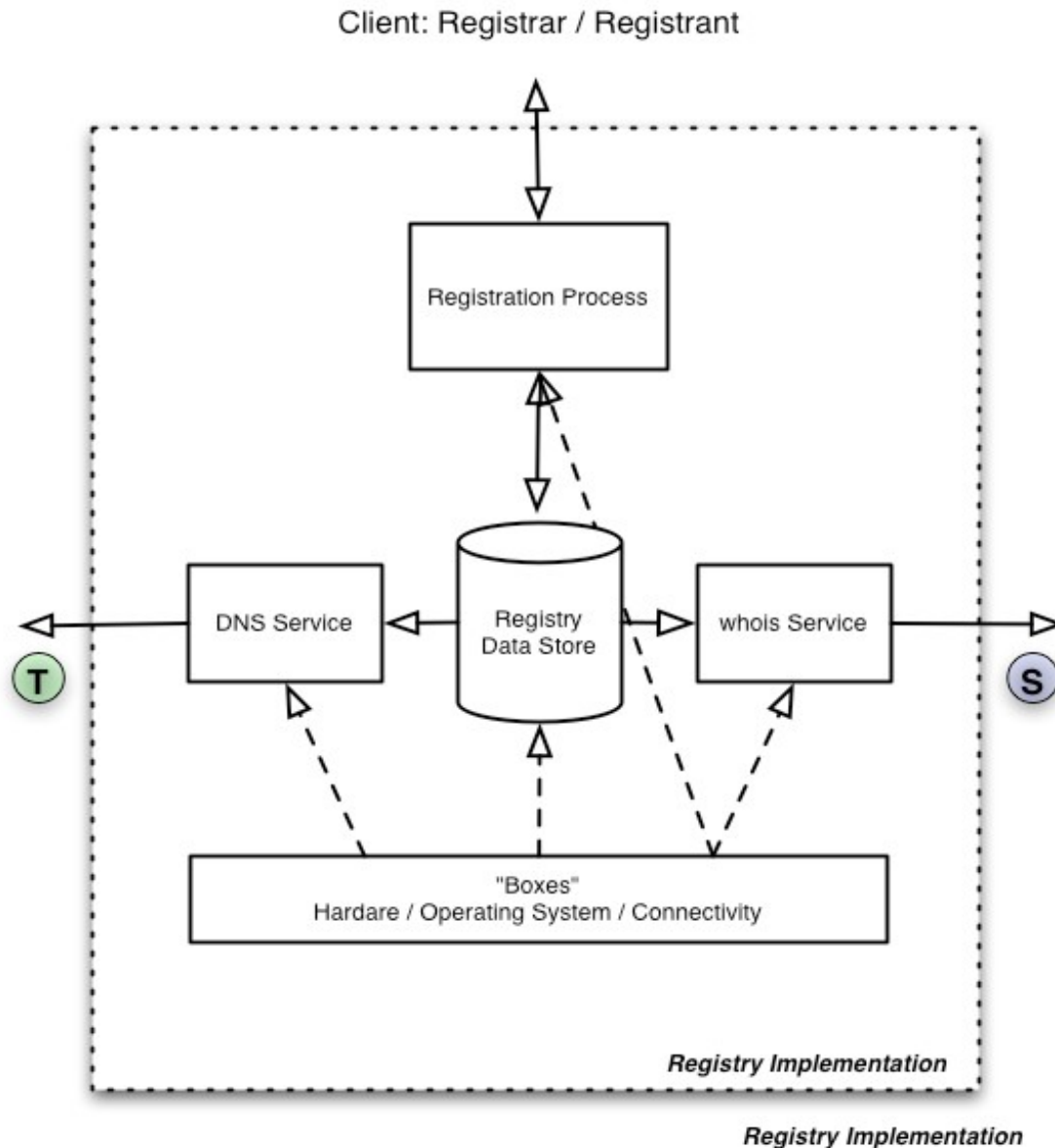
P = policy data (local community policies, IANA policies)

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

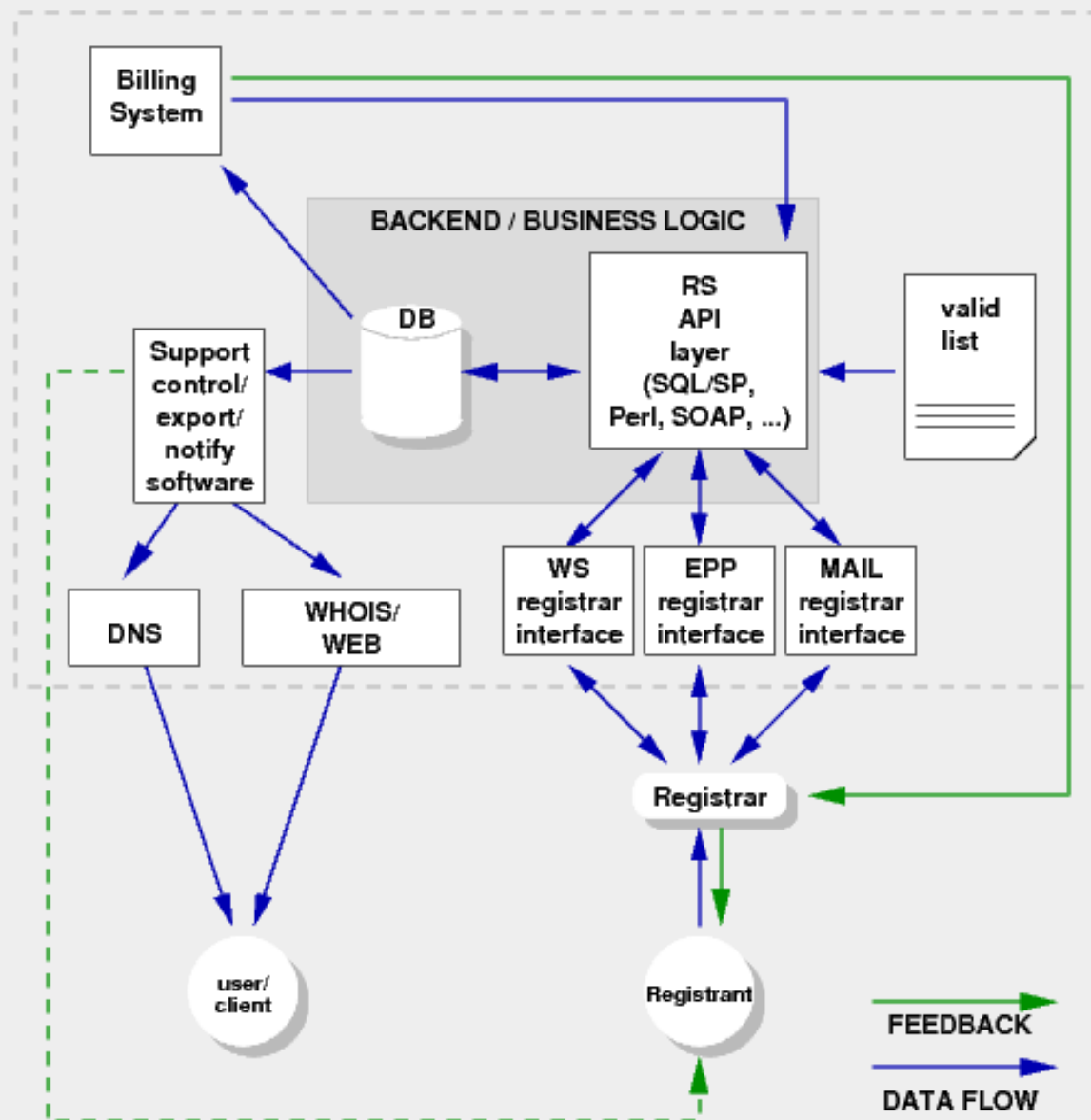
DNS Service

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

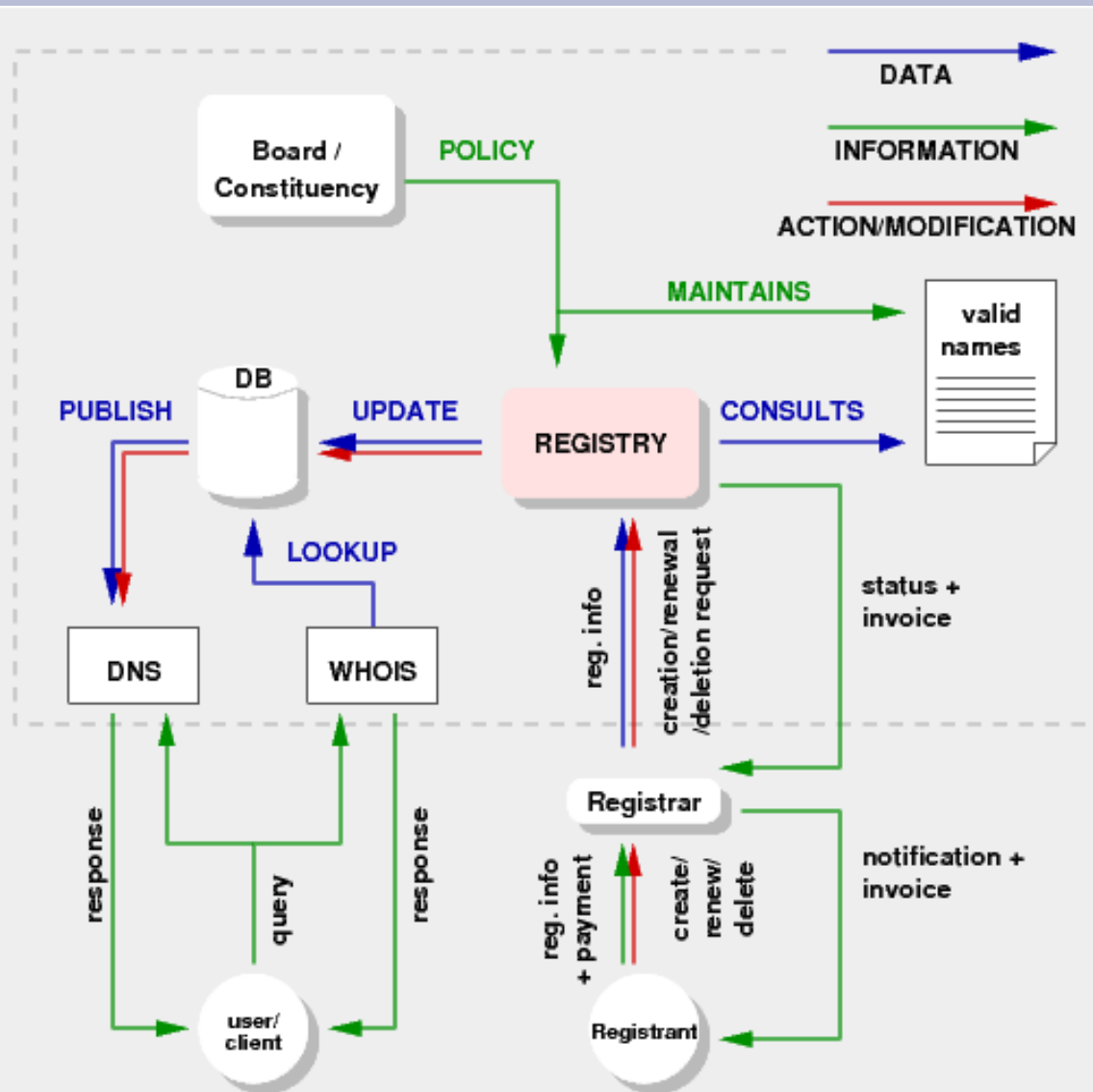
Technical Infrastructure

- Hardware
- Connectivity, Routing
- Operating System
- Editor, scripts
- Registration Tools

Registry: architecture



Registry: architecture



DATA FLOWS IN A REGISTRY