

# Project Jake

## Precise Specification of Collection and Access Rules for Registration Data

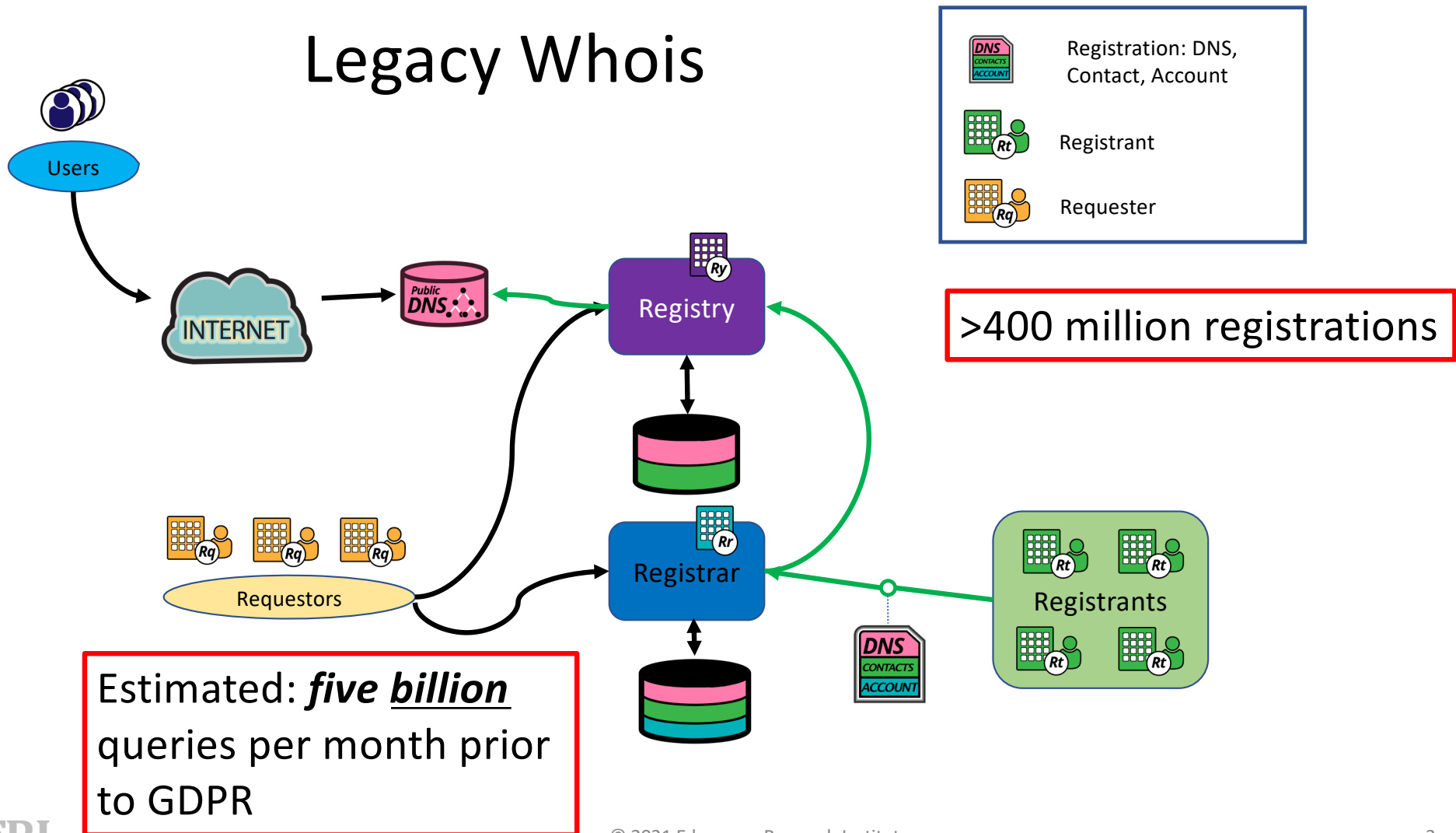
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ROW 10 Presentation 8 June 2021

# Jake, BBQ, Edgemoor Research Institute

- Project Jake
  - Rework RDDS from the ground up
- BBQ Group
  - An ad hoc group of experts working sans portfolio
- Edgemoor Research Institute
  - New non-profit home for this work and related projects
  - <https://www.edgemoorresearch.org> under construction
  - Email: info@[edgemoorresearch.org](https://www.edgemoorresearch.org) or [steve@shinkuro.com](mailto:steve@shinkuro.com)

# Legacy Whois



# Complaints

- Inaccurate data
- Lack of responses
- Harassment
- Cost of Operation

## Complaints

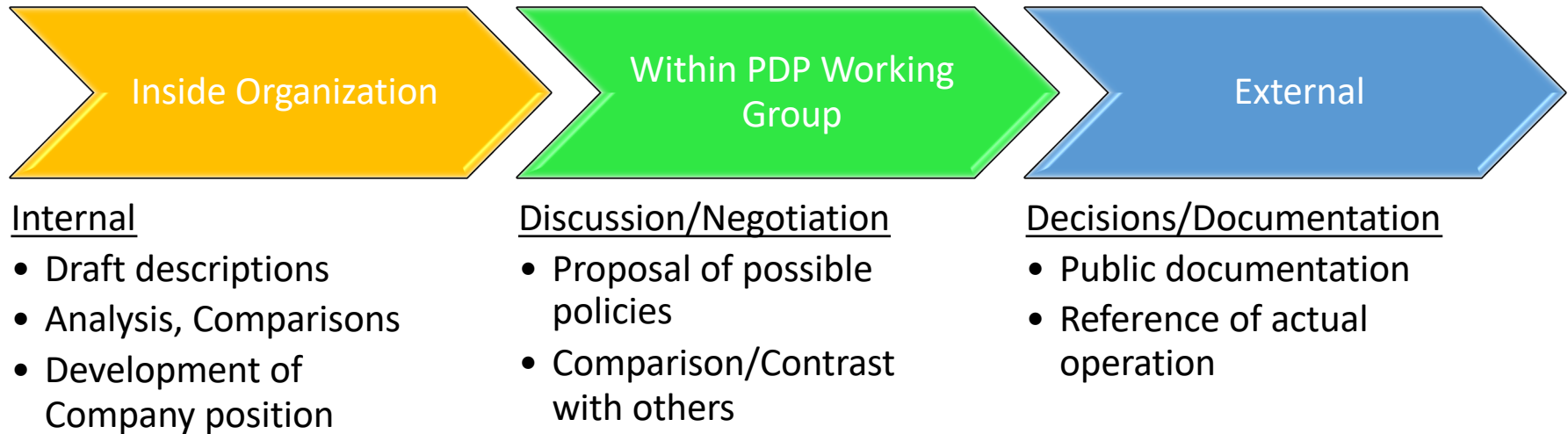
- Inaccurate data
- Lack of responses
- Harassment
- Cost of Operation

Rework from the ground up

# Project Jake: Tools for Expressing/Analyzing...

- Rules for Collecting and Labeling Registration Data
- Request Templates
- Interaction among Rule hierarchies
- Interaction between Collection/Labeling Rules and Requests
- Emphasis is on data details: collection, responses
- Purpose, accreditation, authorization, etc. are complementary

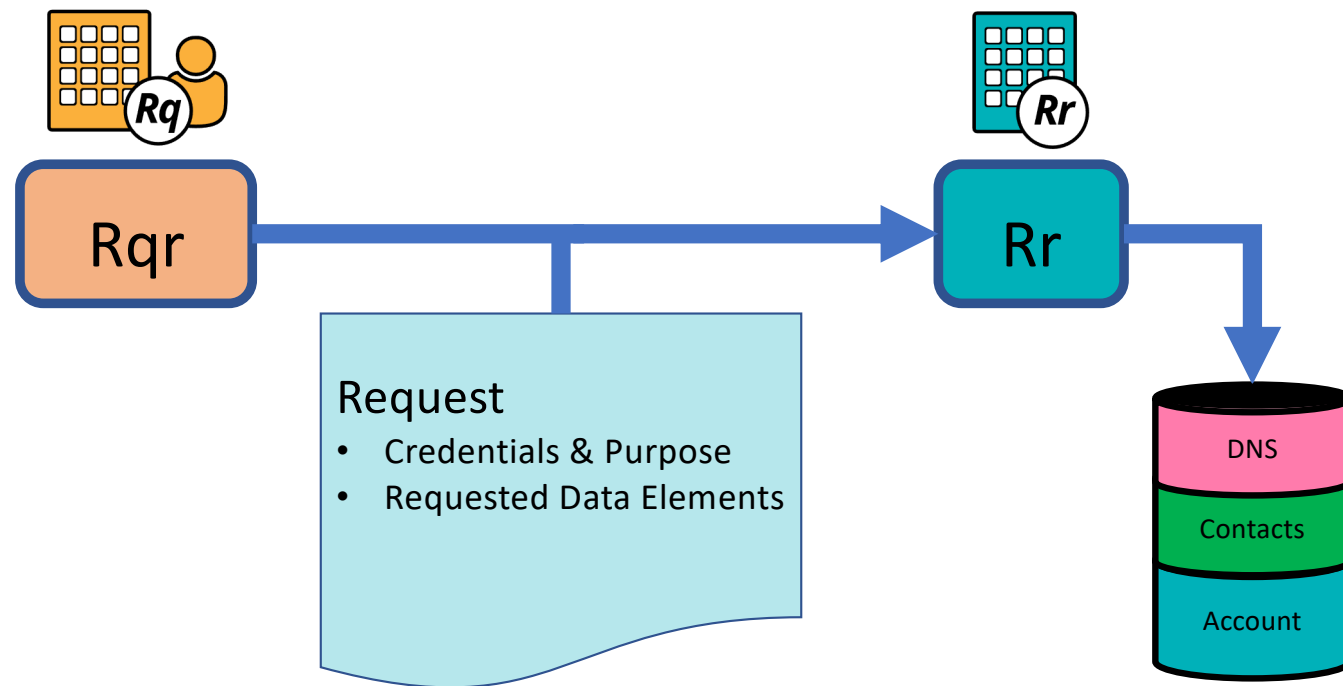
# Three places to use Framework/Model



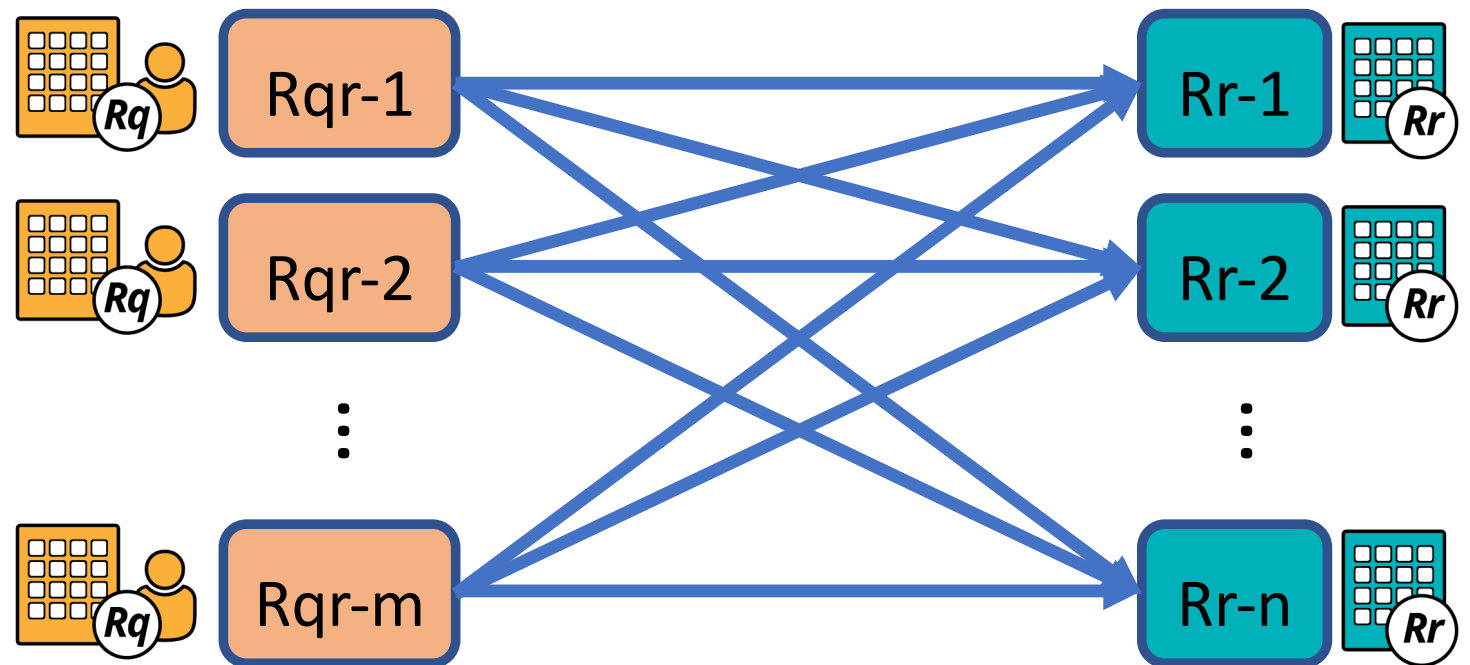
# The Big Picture

- Co-operatives
- Collection Rules
- Request Templates
- Data Dictionary

# Requests



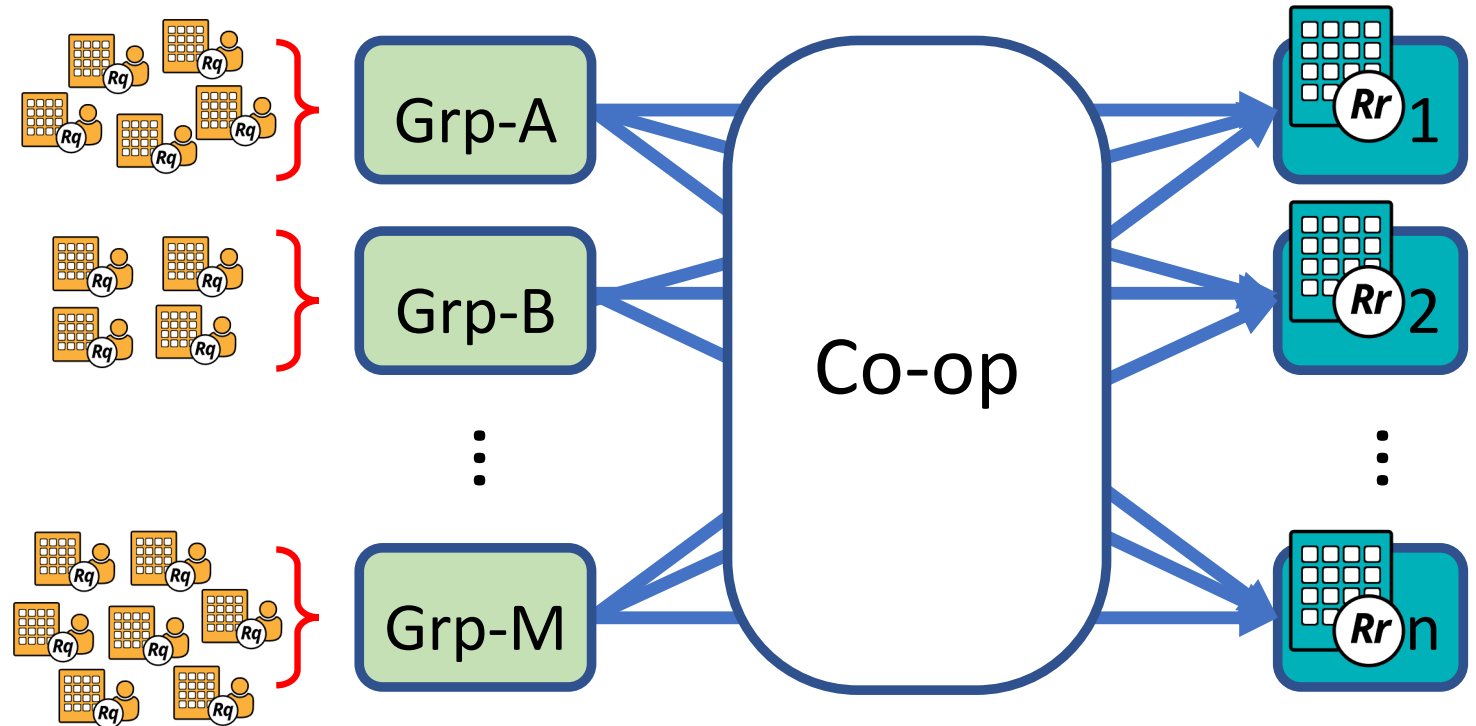
# Registrars and Requesters



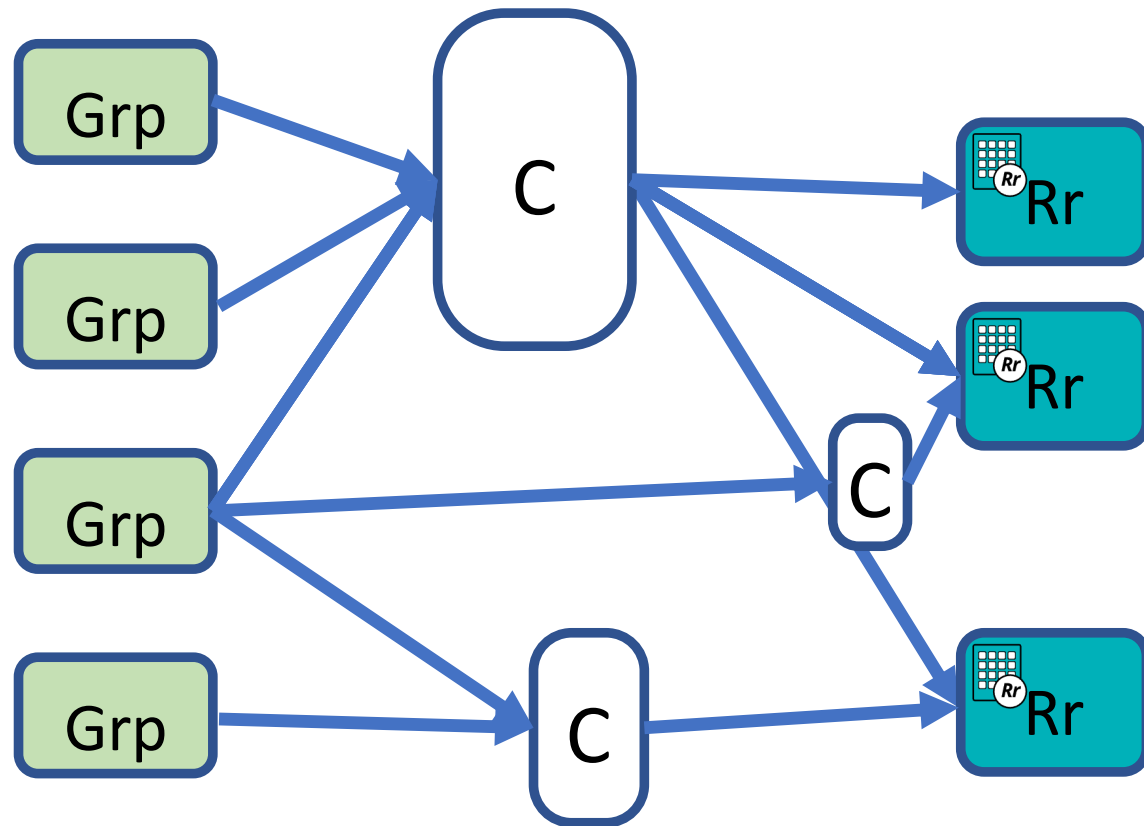
# Accredited Groups and Co-operative Agreements

## Groups

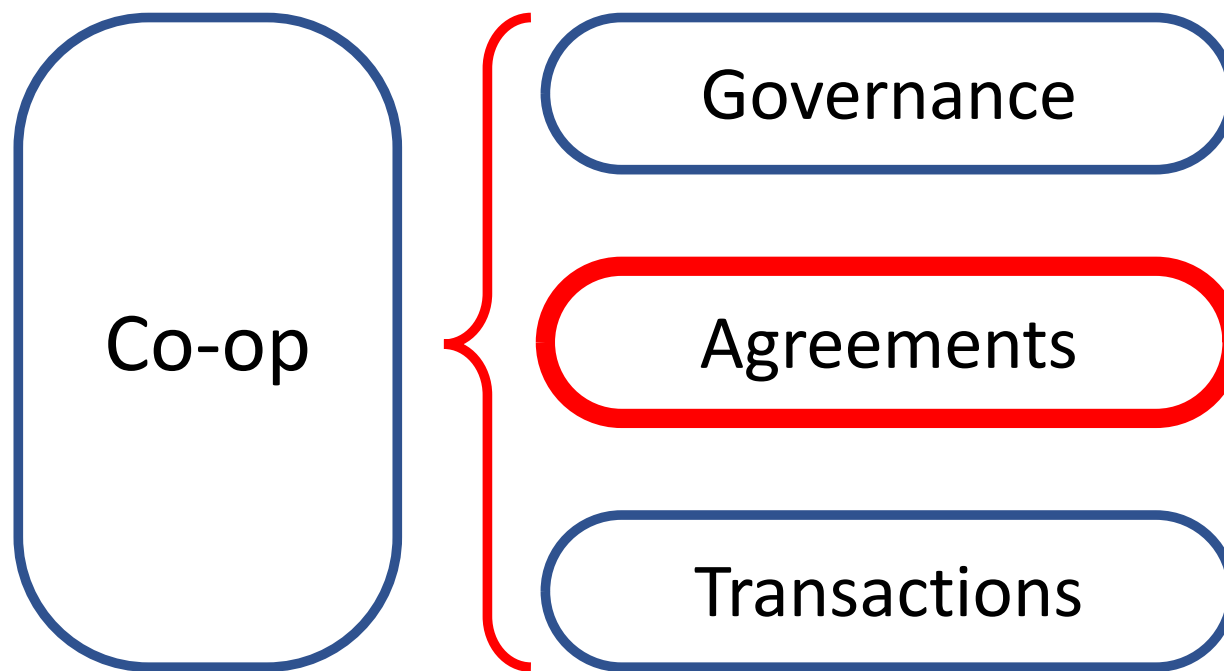
- LEA
- IPC
- Security
- M&A
- Public
- ...



# Multiple Co-operatives



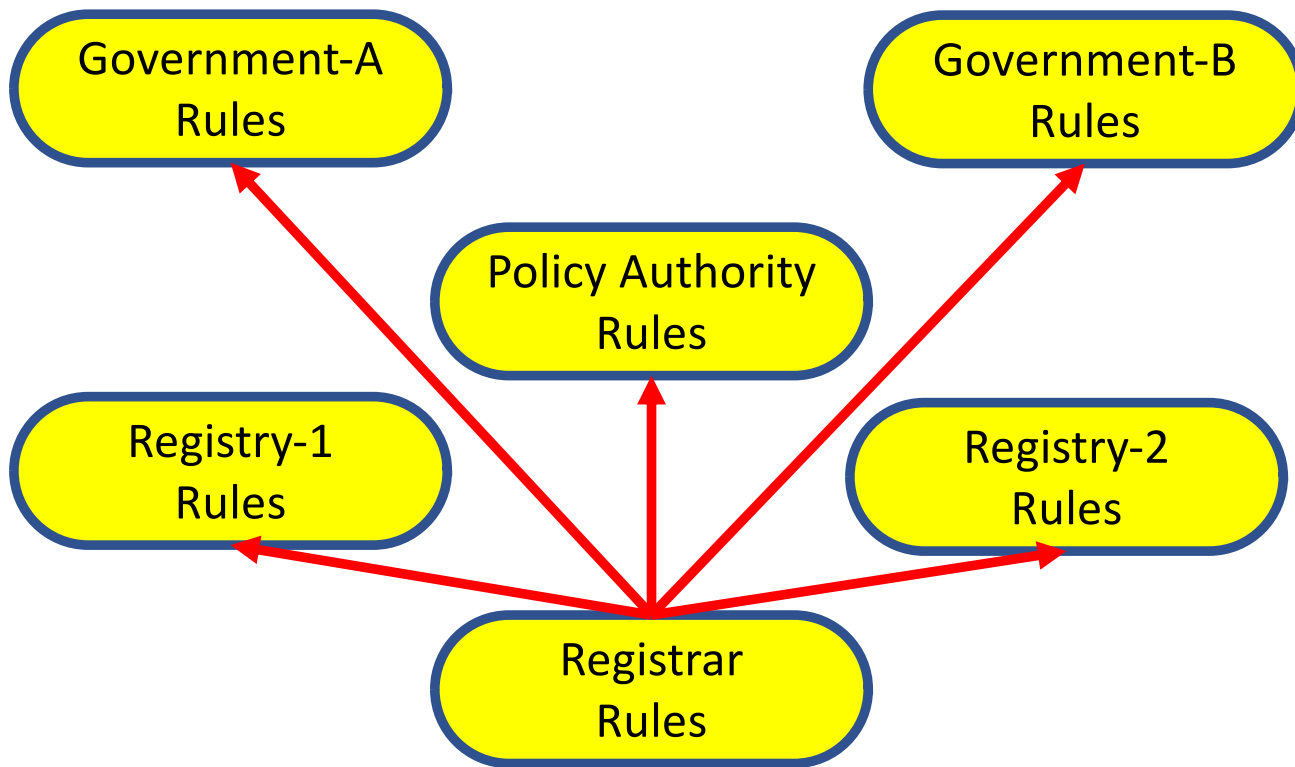
# Components of a Co-operative



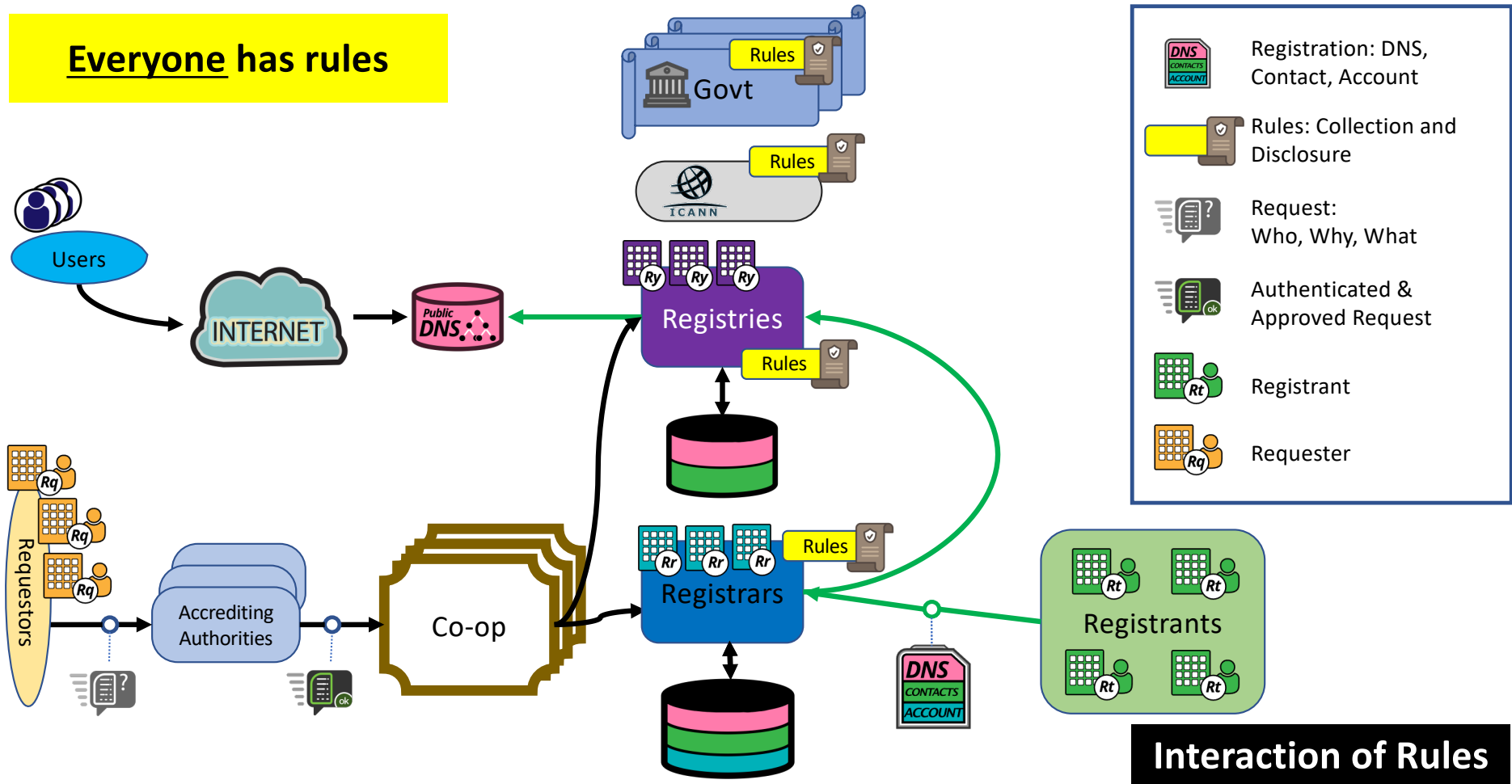
# Authorized Request Agreements

	1	2	...	n
Grp-A	x			
Grp-B	x	x		
...				
Grp-m	x			x

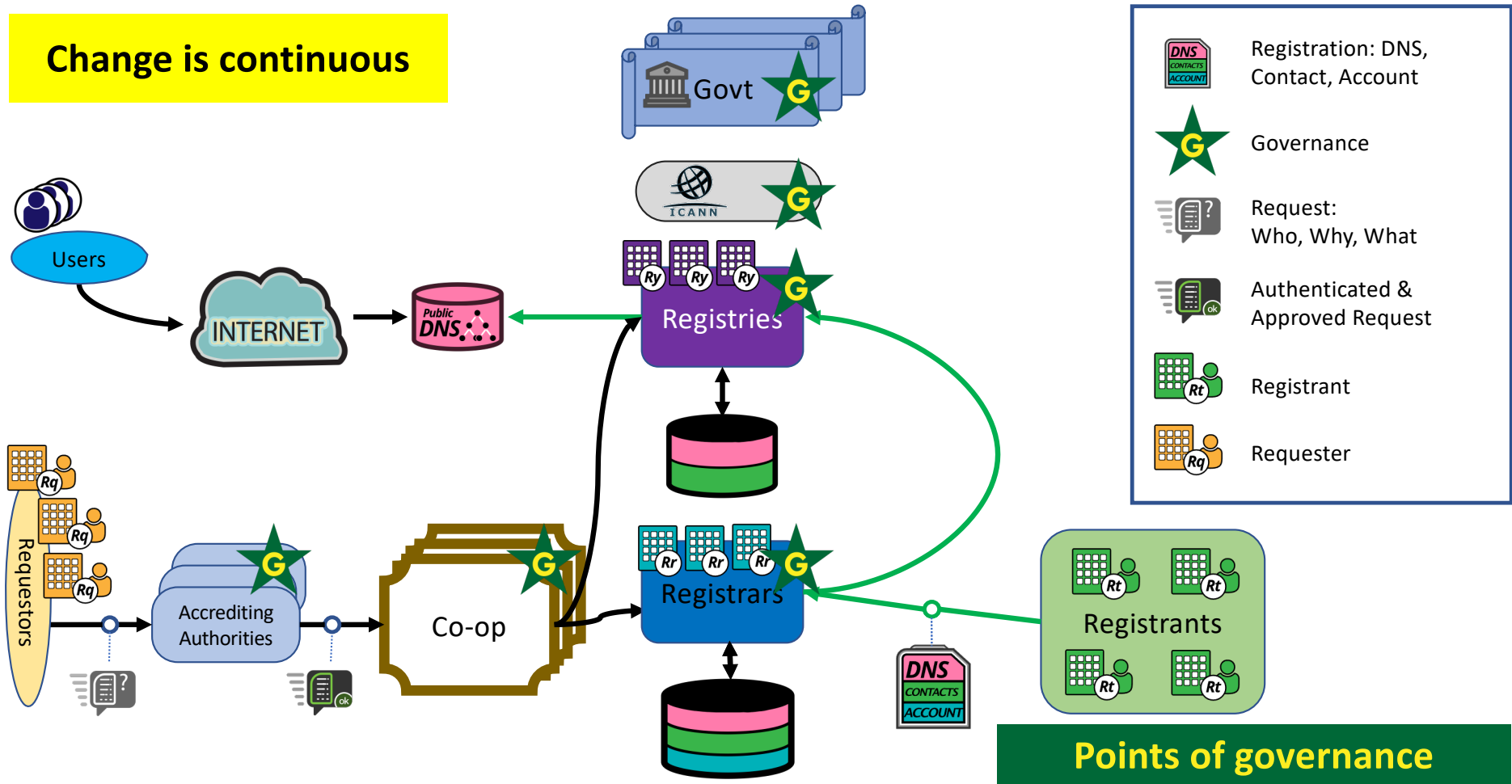
# Looking Upward to Satisfy Multiple Rules



## Everyone has rules



## Change is continuous



# Collection/Labeling Rules

# Collection & Labeling Rules

- Collection/Labeling of each element
  - Required, optional or not collected
  - Sensitivity:
    - Public
    - Private
    - Very private
    - Legal process required
  - Registrant choice to make public
  - (Validation, transfer upward)
- Scope of each rule set
  - TLDs
  - Legal/Natural/Unspecified
  - Normal/ProtectedUnspecified

**Sensitivity plays a key role in response to requests**

## Collection and Labeling Rules



## Data Dictionary

Data Elements		Collection and Labeling Settings				
Group	Element	Collect	Validate	Sensitivity	Disseminate	Storage
DNS records	IP	Yes	Yes	Yes	Yes	Yes
	IP	Yes	Yes	Yes	Yes	Yes
	IP	Yes	Yes	Yes	Yes	Yes
	IP	Yes	Yes	Yes	Yes	Yes
	IP	Yes	Yes	Yes	Yes	Yes
Reg Details	Registration Date	Yes	Yes	Yes	Yes	Yes
	Expiration Date	Yes	Yes	Yes	Yes	Yes
	Registration Date	Yes	Yes	Yes	Yes	Yes
	Expiration Date	Yes	Yes	Yes	Yes	Yes
	Registration Date	Yes	Yes	Yes	Yes	Yes
Payment & Transaction Details	Payment Method	Yes	Yes	Yes	Yes	Yes
	Payment Method	Yes	Yes	Yes	Yes	Yes
	Payment Method	Yes	Yes	Yes	Yes	Yes
	Payment Method	Yes	Yes	Yes	Yes	Yes
	Payment Method	Yes	Yes	Yes	Yes	Yes
Account Holder (Customer)	Account Holder	Yes	Yes	Yes	Yes	Yes
	Account Holder	Yes	Yes	Yes	Yes	Yes
	Account Holder	Yes	Yes	Yes	Yes	Yes
	Account Holder	Yes	Yes	Yes	Yes	Yes
	Account Holder	Yes	Yes	Yes	Yes	Yes
Registrant (Registered Name Holder)	Registrant	Yes	Yes	Yes	Yes	Yes
	Registrant	Yes	Yes	Yes	Yes	Yes
	Registrant	Yes	Yes	Yes	Yes	Yes
	Registrant	Yes	Yes	Yes	Yes	Yes
	Registrant	Yes	Yes	Yes	Yes	Yes
Admin	Admin	Yes	Yes	Yes	Yes	Yes
	Admin	Yes	Yes	Yes	Yes	Yes
	Admin	Yes	Yes	Yes	Yes	Yes
	Admin	Yes	Yes	Yes	Yes	Yes
	Admin	Yes	Yes	Yes	Yes	Yes

Current Policy org.bbq

Org name	GoDaddy	Updated	21-Aug-20
Org type	Registrar	Version #	2
Prime POC	Jody Koller	Completion	Start
Prime email	jody.koller@godaddy.com	Status	Actual
Alt POC	Rich Merdinger	Date	
Alt email	rich.merdinger@godaddy.com	Distribution	Yes
Notes			

Applicability	
TLD(s)	org
Registration	Yes
Redemption	Yes

## Handling

- Draft/Final
- Proposed/Planned/Actual
- Internal/BBQ/NoAtt/Public

## Scope

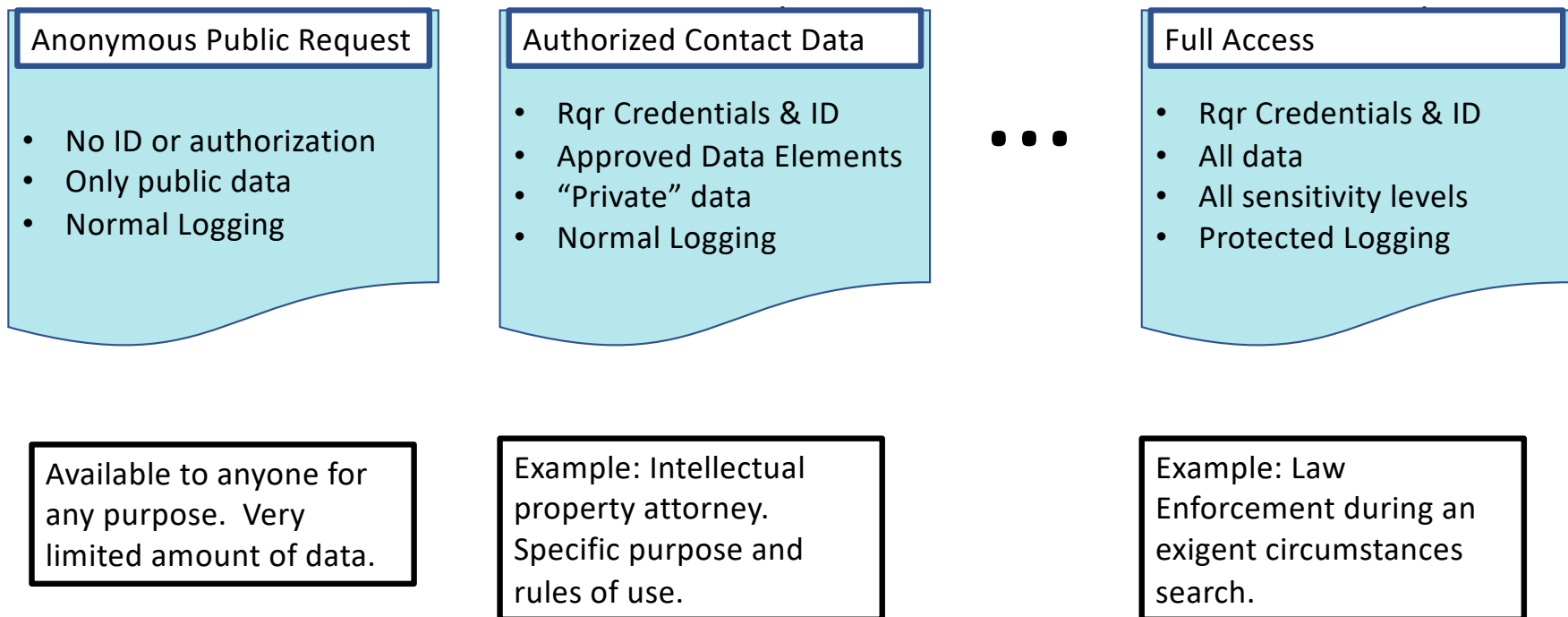
- Which TLDs?
- Natural, Legal, Unspecified?

## Collection and Labeling

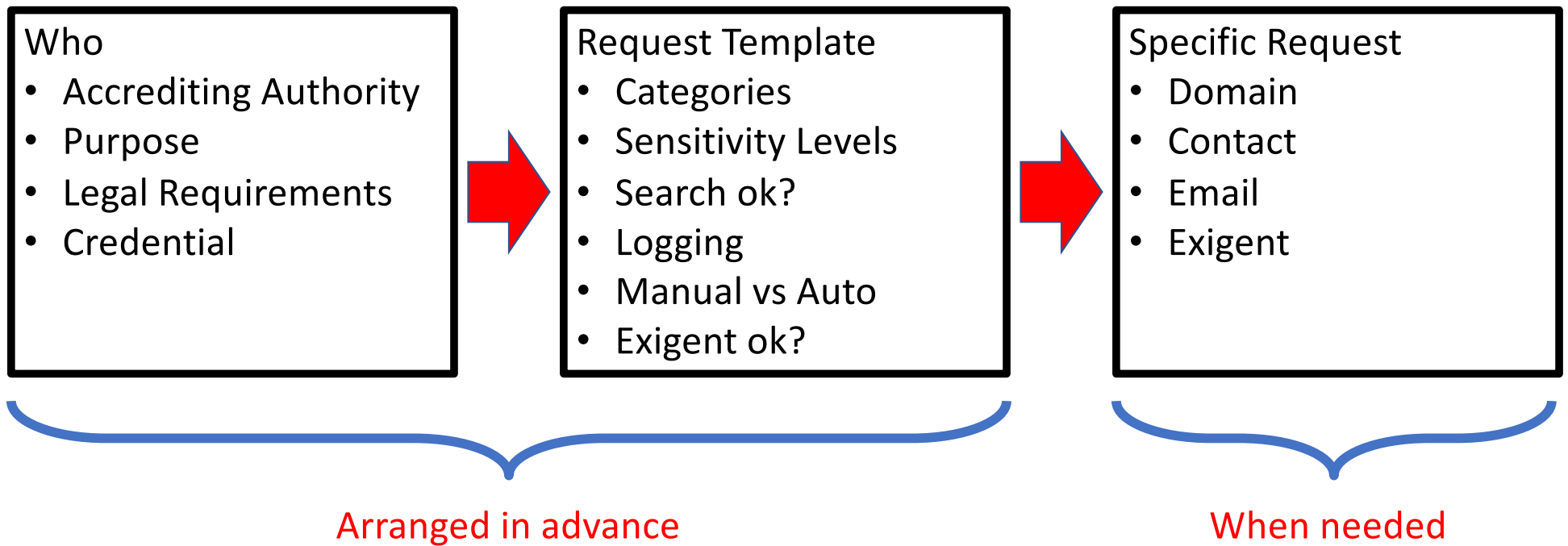
- Collect/No Collect/Optional
- Validation: None, Syntax, Op'n, Full
- Sensitivity: Public, Private, Very Private, LEA
- Ok to request public?
- Storage

# Requests

# Illustrative Request Templates



# Request Sequence



## Request Template: Trademark Attorneys and similar



Org name	GoDaddy	Updated	26 August 2021
Org type	Registrar	Version #	1
Prime PoC		Completion	Draft
Prime email		Status	Actual
Alt PoC		Date	
Alt email		Distribution	HRQ
Notes			

Per Request

Requester ID		Date	
Requester Email		Request Form ID	TMquery
Exigent?		Record Auth	
Description	Trademark infringement query		
Requesting Organization		Notes	
Trademark lawyers, usually			
Purpose		Notes	
Inquiry in support of possible trademark infringement. Request must include trademark name, trademark registration number, and jurisdiction. Must include description of the manner of infringement. Must fill out both non-public registration(?) data.			
ID_Req?	Required	DNS	Include
Search_name?	No	RegOp	Include
Search_email?	No	Forensic	None
Domain		Org	Include
Contact		Name	Include
Email		Email	Include
Processing	Manual	Phone	Include
Exigent OK?	Not Permitted	Location	Post & Street Address
Logging	Do Not Track	UniqueID	None
Manual Processing Notes		Sensitivity	S2

ID_Req?	Required		DNS	Include	
Search_name?	No		RegOp	Include	
Search_email?	No		Forensic	None	
Domain			Org	Include	
Contact			Name	Include	
Email			Email	Include	
Processing	Manual		Phone	Include	
Exigent OK?	Not Permitted		Location	Post & Street Address	
Logging	Do Not Track		UniqueID	None	
			Sensitivity	S2	
Manual Processing Notes					

Prefilled Template

# General Classes of Requests

	Speed	Processing Cost
Anonymous requests (Legacy Whois)	Fast	Low
Public requests with identity and attribution	Fast	Low
Automated Credentialed Requests	Fast	Low/Medium
Credentialed Requests with Manual Review	Slow	High
None of the above	Very Slow	Very High

## Automation is Important

# Data Dictionary

# Data Dictionary

- Data Dictionary of approximately 90 Defined Data Elements
  - Publicly defined; common definitions
  - Each collector uses its own subset of the data elements
- Data Elements are grouped into several Categories
  - Kind (e.g. DNS/locks/contacts)
  - Degree (street address vs country)
  - Categories play a key role in response to requests

# The Current Data Dictionary

## >90 Data Elements with Categories & Subcategories

- **DNS**: NS, A, AAAA, DS, DNSKEY
- **RegOp**: Reg date, exp date, ...
- **Forensic**: Account ID, Account holder, payments, IP address at reg'n time

- **Contacts**:
  - Registrant
  - Admin
  - Tech
  - Billing



- **Name**
- **Organization**
- **Phone(s)**
- **Email**
- **(Email or Phone)**

- **Location**:
  - **Country**
  - **State/Province**
  - **City**
  - **Post & Street Address**

# Tools

# Tools

- Specification of Collection and Labeling Rules
  - A registrar might have multiple sets of rules
- Comparison of competing rules
- Analysis of hierarchy
  - Look upward at registry, policy authority, government rules
- Specification of Request Templates
  - Provides a way for Requesting communities to say what they would like
- Display of effect of collection/labeling rules and request templates

# Engagement

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