

Proposed

Name Collision Analysis Workflow

## Proposed Name Collision Analysis Workflow

1. Application submitted
2. Capture a picture of the collisions
3. Applicant prepares addendum to application
4. Board gets package for review

# 1. Application Submitted

- Are name collisions present?
  - If not, skip to step 4
- How do we know if they are present?
  - DITL data review
  - Pre-publish top N list
    - ITHI
    - IMRS Hedgehog
  - Other real-time data
- How does this get done?
  - Some kind of technical review team will need to exist

## 2. Capture a picture of the collisions (1 of 3)

- Some kind of technical review team will need to exist to collect the facts
- Define the “picture” to create
  - Based on the critical diagnostic measurements
- Assumes passive data at root or other DNS sources are available
  - Technical Review Team creates a technical package
  - Technical Review Team explains the package to the applicant
- What is the role of controlled interruption or a honeypot?

## 2. Capture a picture of the collisions (2 of 3)

- Critical Diagnostic Measurements
  - Query Volume (DNS query count)
  - Query Origin Diversity (IP distribution / Network diversity: ASN distribution)
  - Query Type Diversity
  - Label Diversity
  - Other characteristics: OSINT of string being used]

## 2. Capture a picture of the collisions (3 of 3)

- Find the ***impact***
  - Do we know why it's leaking?
  - What is the source of the collision?
  - When did collisions start? - time window for analysis
  - What could happen and what would the impact be if the delegation actually takes place?
- What is the role of the technical review team with respect to finding the impact?

### 3. Applicant prepares addendum to application

- Assume applicant wants to proceed with application
  - Could choose to withdraw
- Analysis of “impact”
- Remediation proposal
- Mitigation proposal
- Is controlled interruption or a honeypot need?

#### 4. Board gets package for review

- Three possible outcomes
- YES - approve application
- NO - reject application
- MAYBE
  - ***Temporary delegation for either Controlled Interruption or Honeypot***
  - Iterate on steps 2 and 3
  - Applicant integrated to do risk management and create addendum
  - Revised package to the Board for a final decision