

Proposed

Name Collision Analysis Workflow

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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