Trademark Clearinghouse

Working Session: Sunrise and Trademark Claims Implementation

15 October 2012
Background

• Activity since Prague
  – Technical mailing list released at Prague meeting
  – ICANN revision to model released, June 28
  – Brussels Implementation Forum, August 20-21
  – Alternative Proposals Released, September 12-13

• Some of the issues affect many stakeholders
  – This session is a response to bring stakeholders together to address areas of concern.
Agenda

• Introduction (10)
• Registry Sunrise Options (25)
• Encryption and Protections (25)
• Claims timing parameters (25)
• Conclusions and next steps (5)
Registry Sunrise Data Access

Data to support registry sunrises
The Community Sunrise Model

How it works
(hopefully simplified)
The Goal

• A mark holder wants to register a domain name during the sunrise period of a TLD
The Challenge

• Must have an eligible mark registered in the TMCH

• Registry needs to be able to verify this
Solution Requirements

• Simple
• Decoupled
• Supportable
• Respectful of existing processes

There will be trade-offs!
Who?

- TMCH
- The Registry Operator
- The Registrar
- The mark holder
High Level Process

1. TMCH collects & verifies information
2. Stores it
3. Mark holder request registration of domain name
4. Registrar sends request to Registry
5. Registry confirms mark details
6. Name is allocated
Meaning???

At step 5 the Registry needs to know something that the TMCH knows

How?
Simple...

Ask the TMCH:

“Hey buddy, do you have this mark in your database? Is it eligible for Sunrise?”

Problem: This doesn’t meet our requirement (it’s tightly coupled)

So what then?
Enter PKI

Huh?
What is PKI?

For our purposes:

• Entity can assert that a piece of information came from them

• Other entities can verify that the information did indeed come from the first entity and that it hasn’t been modified by a third party
But...How does it do that?

- Asserter & Verifier
- Asserter generates a public/private key pair
- Asserter distributes public key
- Asserter signs information using private key
- Verifier can validate the information using the public key
PKI in Summary...

- Private key stays private and is used to sign data
- Public key is made public and is used to verify data

So how does this apply to the TMCH?
PKI & The TMCH

• TMCH generates public/private key pair
• TMCH provides mark holder with Signed Mark Data (SMD)
• Mark holder provides SMD to Registrar
• Registrar passes SMD to Registry
• Registry verifies SMD using TMCH public key

Simple 😊
Meets Solution Requirements

- Simple ✔
- Decoupled ✔
- Supportable ✔
- Respectful of existing processes ✔
Other Benefits

• Registrars can detect and fix issues
• Mark holders in control of data
• Registries can request data from mark holders
  – No independent validation of that data
• Uses proven technology
• Less chatter
That’s It!
What is a Sunrise Code?

1365 1163 1464 1361 7924

- Matches a domain name label (the “example” in “example.tld”)
- Valid codes provide “yes/no” answer to question: have the minimum sunrise eligibility requirements been met?
Thank you for your interest in registering example.TLD

In order to register this domain name, you need to provide the sunrise code that validates your eligibility to register.

Sunrise Code:  

Send
What is a Signed Mark Data file?

<?xml version="1.0" encoding="UTF-8"?>
<smd><mark>Example & Test</mark><ulabels><label>example-and-test</label><label>exampleandtest</label><label>example-test</label><label>example--test</label><label>example---test</label><label>exampleandtest</label><label>example-andtest</label></ulabels><owner><organization>Example, LLC</organization><address><addr1>12345 Nosuch Place</addr1><addr2>Contact Name</addr2><city>Los Angeles</city><province>California</province><postalcode>90210</postalcode></address></owner><validity><rights><jurisdiction>US</jurisdiction><descr>Nice class 42</descr><type>registered</type><registered>2001-01-04</registered><expires>2011-01-03</expires></rights><rights><jurisdiction>CA</jurisdiction><descr>Testing and demonstration services</descr><type>registered</type><registered>2001-01-04</registered><expires>2011-01-03</expires></rights><tmch><listed>2012-04-20</listed><expires>2013-04-19</expires></tmch></validity><Signature xmlns="http://www.w3.org/2000/09/xmldsig#"><SignedInfo><CanonicalizationMethod Algorithm="http://www.w3.org/2000/09/xml-c14n#WithComments"/></SignedInfo><SignatureValue>KedJuTob5gtvYx9qM3k3gm7kbLBwVbEQRl2S2tmXjqNN7MRGtoew==</SignatureValue><KeyInfo><KeyValue><DSAKeyValue><P>/KaCzo4Syrom78z3EQ5SbbB4sF7ey80etK1I864WF64B81uRphS9jQTxeEu0ImbzRMgzVDZKVG9x7nN1kuFw==</P><Q>li7dzDacuo67Jg7mtqEm2TTruOMU==</Q><G>Z4Rxsnqc9E7pGknFFH2xgaryRPBAQ01khpMdLRQnG541Awtx/XPaF5Bpsy4pNWMOHCBiNU0NqsQW5Qvn1MpA==</G><Y>qV38IqrWJGOV/mZQvRVi0OHw9Zj84nDC4jO8P0axi1gb6d+475yhMjSc/BrIVC58W3ydbkK+Ri4OKbaRZ1YeRA==</Y></DSAKeyValue></KeyValue></KeyInfo></Signature></smd>
Thank you for your interest in registering example.TLD

In order to register this domain name, you need to provide the SMD that validates your eligibility to register.

SMD File: 

SMD Content: 

Send
Signed Mark Data files

- Intended to be viewed with a standard web browser (XML file)
- File has to be uploaded from registrant to register during sunrise.
- Valid SMD files demonstrate “yes/no” answer to question: have the minimum sunrise eligibility requirements been met?
- In addition, the SMD file is **extensible** and can communicate additional information about the trademarks being relied upon for sunrise registration.
For Discussion

1. Is this interface a significant difference for the users?

2. Will the technical support requirements be different for the two different models, on balance?

3. Will the security scenarios be different for the two different models, on balance?

4. What information should be provided in an SMD, if the usability is acceptable?
   - Provision of indicators of minimum eligibility
   - Access to Clearinghouse data for registry purposes
Trademark Claims Encryption

Considerations from the community
Trademark Claims

• Trademark Claims is a data publication service
  – Notifies trademark owners when domain names matching their marks are registered.

_and also_

  – Publicizes trademark rights data to prospective registrants to ensure they are better informed prior to domain name registration.

  – The prospective registrant is shown trademark information (“claims notice”) -- this information is, at this point, released to the public and potentially can be captured and used for other purposes.
Data Aggregation

• Data aggregation and the inferences one can draw by combining accessible trademark information: a concern heard from IP stakeholders during the IAG process.

• Data mining is a well-known problem of public information services. This issue occurs in any model.

• There is a tension created by the requirement to provide the trademarks claims service and an expressed desire to restrict access to aggregate data.
Trademark Claims

• The ICANN model incorporates features to address aggregation risks.
  – Encrypts the database provided to registries
  – Includes reporting requirement regarding the number of decryptions
  – Anticipates contractual provisions regarding the responsibility of registries
  – Suggests that registries/registrars should use existing rate limiting technologies in their EPP interfaces to help curtail aggregation via the Trademark Claims process
Encryption and the ICANN model

• What does the encryption do?
  – Protects against accidental disclosures
  – Communicates (by imposing a significant cost to registries) expectations about proper handling and use of data by registries, aligned with contractual terms.

• What does encryption not do?
  – Is not intended to nor will it prevent an assumed malicious actor from successfully building an aggregate picture of trademark claims data
"In the view of the authors the current proposed encryption model is meaningless. The encryption only exists to stop registries reading the entire TMCH database...

"We recommend that should data still be provisioned with a registry that the data is provided without encryption. Most registries do not have any interest in this data, however encrypting it assumes that registries are bad actors. However any registry that is a bad actor can easily get access to the data anyway...
The Encryption Thing...

Claims Service
Encryption

Tries to solve a problem (but doesn’t really and just makes other things harder)

This is not black and white

We need to talk about it...
Trademark Claims Parameters

Timing of Claims-related events
Timing of Claims Notices

Claims Service
Claims Notices

• Works ok in normal FCFS

• We need help figure out how they should work for:
  – Pre-registrations?
  – Land Rush?

Discuss...
Contact

Chris Wright
CTO – ARI Registry Services

chris.wright@ariservices.com
Trademark Claims Parameters

• Trademark Claims data is expected to have some degree of change occurring over time
  – Additions, removals, updates to relevant trademark data

• Some domain name allocations do not occur in real-time

• Timing of trademark claims functions becomes relevant in the context of, for example:
  – Auctions
  – Pre-registration offered by some registrars/resellers
Trademark Claims Timing Parameters

• How long after retrieving a trademark claims notice until it must either be accepted or refreshed prior to use in a domain name registration?

• How long after accepting a trademark claims notice can that accepted be used in a domain name registration without checking for updated data from the Clearinghouse?
Claims timing parameters
Thank You