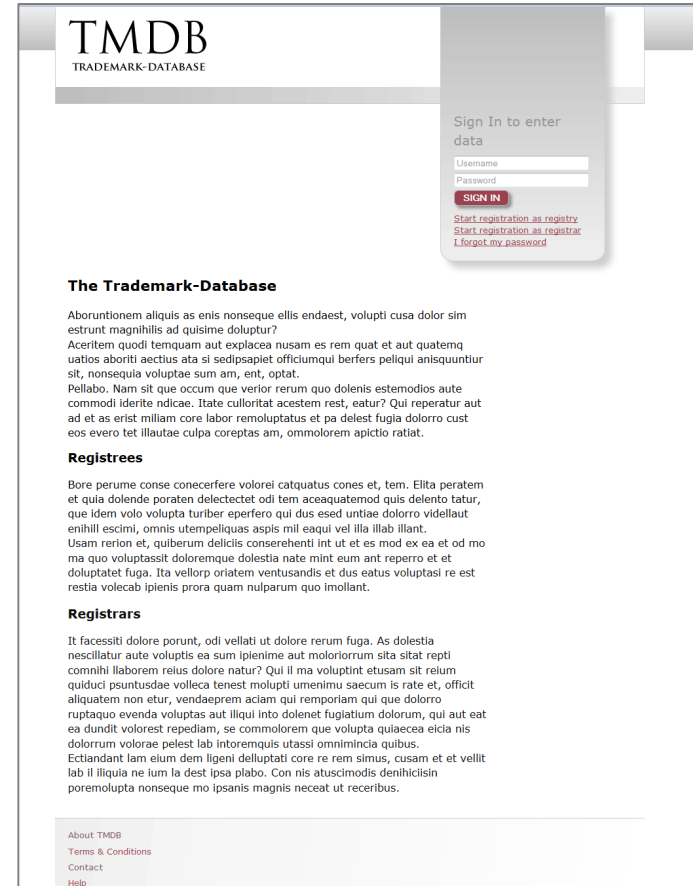


# Trade Mark DataBase (TMDB) for Sunrise and Claims

## Webinar 4: TMDB Claims services (Registries)

Presenter(s) : IBM

Version : 0.6



The screenshot shows the TMDB (Trademark-Database) website. At the top left, the logo reads "TMDB TRADEMARK-DATABASE". On the right side, there is a "Sign In to enter data" section with input fields for "Username" and "Password", a "SIGN IN" button, and links for "Start registration as registry", "Start registration as registrar", and "I forgot my password". Below this, the heading "The Trademark-Database" is followed by a paragraph of placeholder text. Further down, there are sections for "Registrees" and "Registrars", each with their respective placeholder text. At the bottom left, there is a navigation menu with links for "About TMDB", "Terms & Conditions", "Contact", and "Help".

## Introduction - Contents of this webinar

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**Introduction**

Revising Sunrise services

Configuring Claims services

Testing Claims services

Upcoming webinars

Supporting material

## Introduction: The scope of this webinar

This session is intended for **Registry Operators** and will cover:

- TMDB configuration for access to **Claims** services
- TMDB testing functions and process

	Registries	Registrars
	<b>Webinar 1</b>	
	<ul style="list-style-type: none"> <li>• Introduction to the TMDB</li> </ul>	
Sunrise	<b>Webinar 2</b>	<b>Webinar 3</b>
	<ul style="list-style-type: none"> <li>• Register with TMDB &amp; managing your profile</li> <li>• Sunrise test functions</li> </ul>	<ul style="list-style-type: none"> <li>• Register with TMDB &amp; managing your profile</li> <li>• Sunrise test functions</li> </ul>
Claims	<b>Webinar 4</b>	<b>Webinar 5</b>
	<ul style="list-style-type: none"> <li>• Claims test functions</li> </ul>	<ul style="list-style-type: none"> <li>• Claims test functions</li> </ul>

## Introduction: The goal of this webinar

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The goal of this and the related webinars is to provide:

- An online explanation of the TMDB system to it's users
- Users the possibility to ask questions
- A repository of recorded presentations, questions and answers which serve as useful help resources for TMDB's users



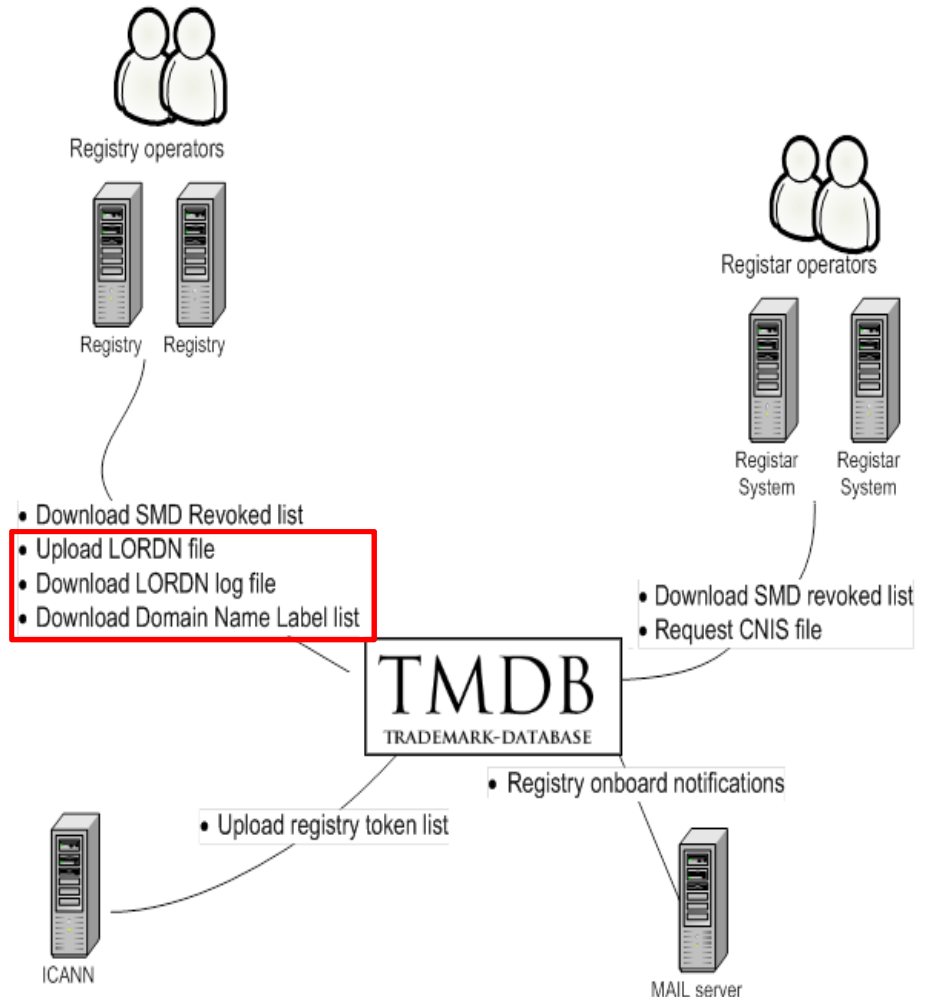
## Introduction: TMDB implementation status update

From August 9th 2013 the TMDB system offers support for the Sunrise processes:

- Retrieve the SMD Revocation List
- Submit the Sunrise LORDN Files and retrieve the related LORDN Log Files

Currently, since September 9th 2013 the TMDB system also supports the Claims processes:

- Retrieve the DNL List
- Submit the Claims LORDN Files and retrieve the related LORDN Log Files
- Retrieve CNIS files



## Introduction - Contents of this webinar

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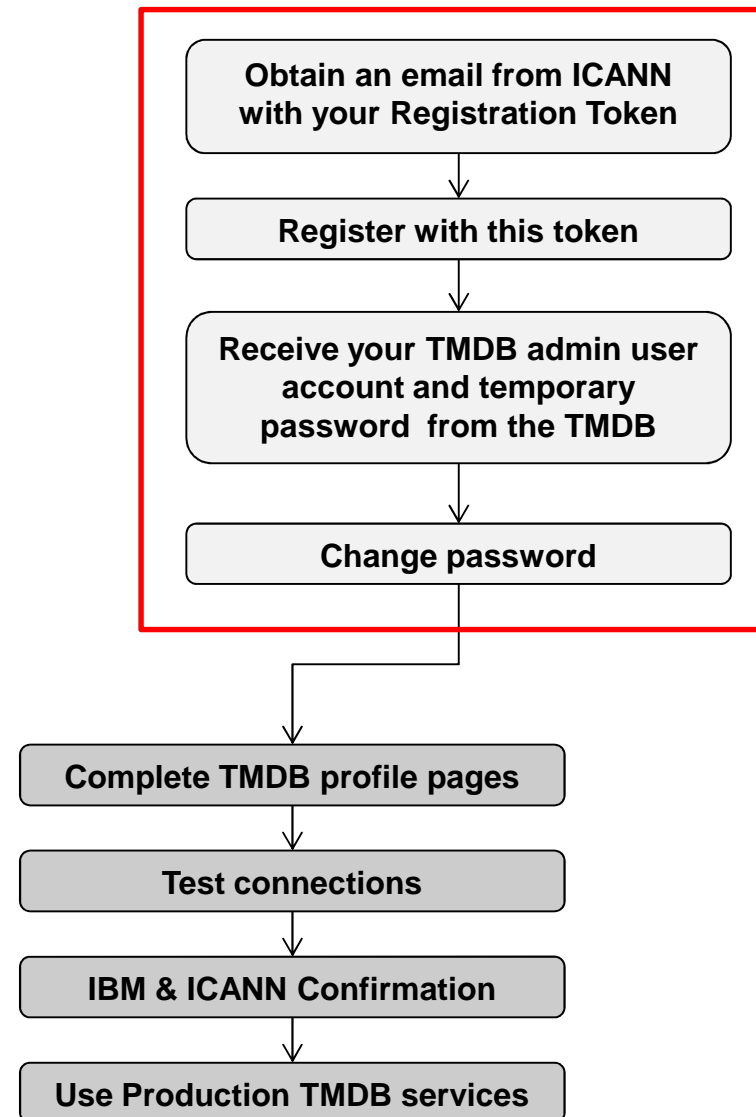
Upcoming webinars

Supporting material

## Revising Sunrise services: TMDB registration steps

In order to set up your TMDB administrator account, several steps are required:

- You will have to obtain an email with an ICANN provided token
- You will have to register with this token to obtain a TMDB user account and temporary password
- After you have received a user account, you have to set your new password



## Revising Sunrise services: Testing the SMD revocation list service

---

Once the SMD revocation list test connections have been configured, they can be tested:

- A test SMD revocation list can be downloaded, as well as the corresponding signature file
- The validity of the SMD revocation list can be verified by using the signature file and the related public key that is published in the TMDB system

A test SMD revocation list can be downloaded from:

<https://test.ry.marksdatabse.org/smdrl/smdrl-latest.csv>

A test SMD revocation list signature can be downloaded from:

<https://test.ry.marksdatabse.org/smdrl/smdrl-latest.sig>



## Revising Sunrise services: Testing the Sunrise LORDN service

---

Once the LORDN connections have been configured, they can be tested by uploading test LORDN files.

As a Registry, you may post a Sunrise LORDN file at the following URL:

```
https://test.ry.marksdatabse.org/LORDN/<TLD>/sunrise
```

LORDN Log Files can be retrieved using the URI provided in the HTTP location header field in the HTTP/202 return code which is issued if the interface was able to receive the LORDN file and the syntax of the LORDN file is correct.

The LORDN log files will be available within 30 minutes of the LORDN file upload. You should not attempt to retrieve more than once a minute.

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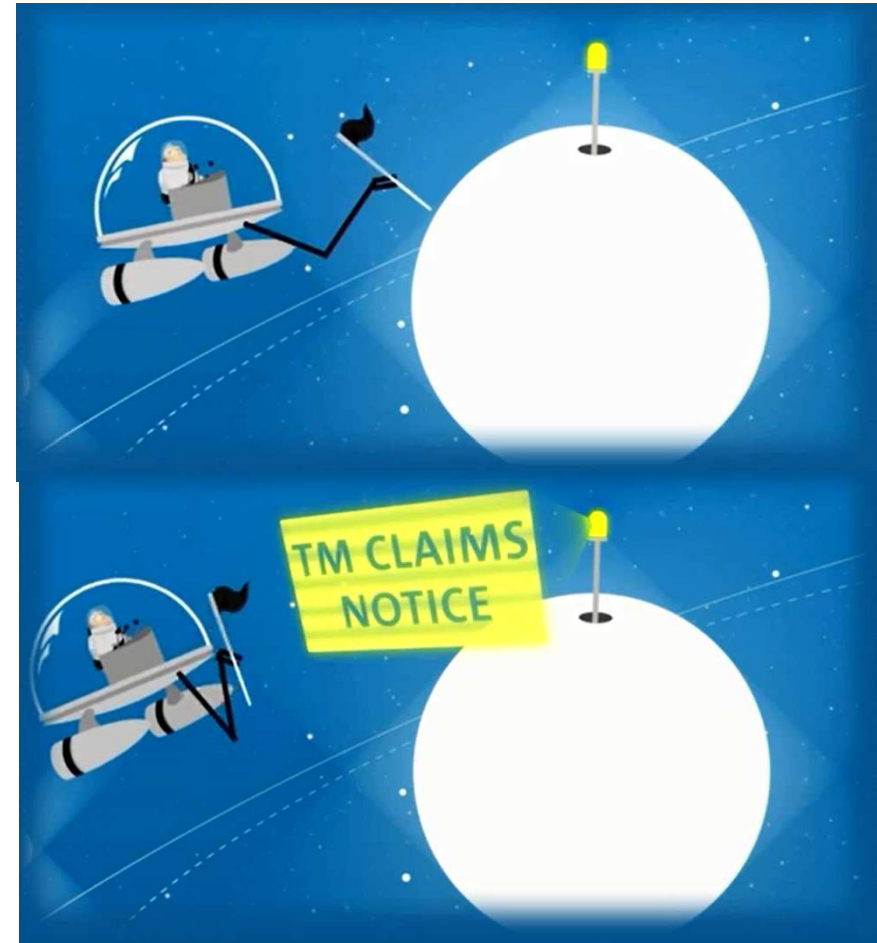
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## Configuring Claims services: What is claims? Overview.

---

- Claims is a rights protection mechanism which is part of the TMCH program.
- It involves a potential registrant being shown, and accepting, a notice about trademarks that they may be infringing if they proceed with domain name registration.
- Therefore the Registrar must check with the Registry whether the domain name is subject to a claim.
- The Registry uses the DNL list from the TMDB to verify this. If a claim exists on a label, the Registrar is provided a Lookup key which the Registrar can use to retrieve the actual claims info from the TMDB.
- Once a domain name with such a claim has been registered, the Trademark Holders as registered in the TMDB system, are notified by the Trademark Validator (TMV).

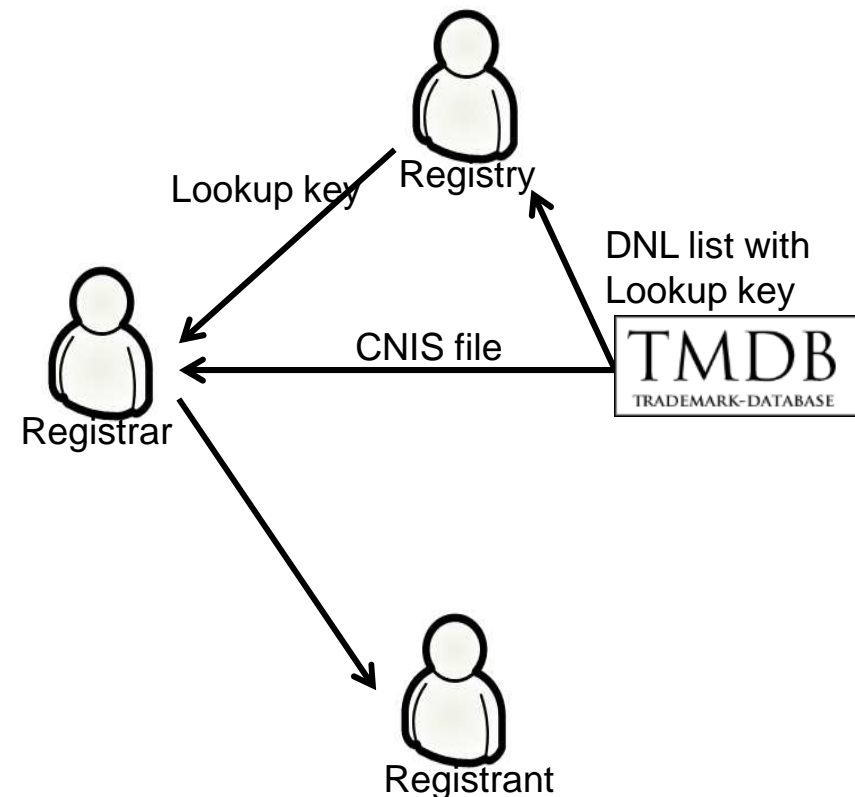


## Configuring Claims services: CNIS & lookup key

A Trademark claim notification is provided in a **CNIS file** (Claim Notice Information Service file). Only registrars have access to CNIS files.

A '**lookup key**' is a reference to a CNIS file. A lookup key can be retrieved from the DNL list and sent to a Registrar. (e.g. 2013041500/2/6/9/rJ1NrDO92vDsAzf7EQzgjX4R0000000001)

In order to supply a Registrar with a Trademark claim notification Lookup key, the DNL list service needs to be configured in the TMDB by the Registry. This service allows the Registry to download the DNL list from the TMDB. It is not accessible by Registrars.

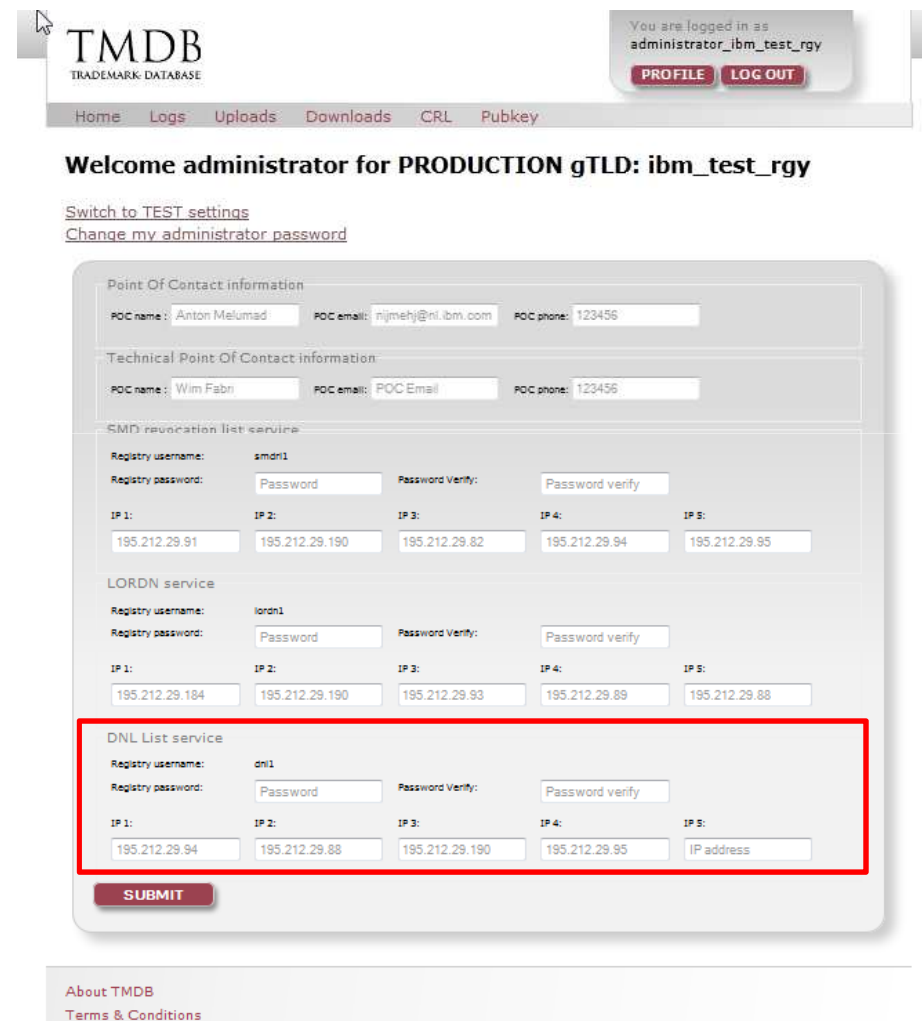


## Configuring Claims services: DNL list service

### Configuring the DNL list service

In order to connect to a DNL list service, the following values are required:

- a password (can be the same as for the other services)
- at least one and maximum 5 IP address for each service (can be the same as for the other service)



TMDB  
TRADEMARK DATABASE

You are logged in as administrator\_ibm\_test\_rgy  
[PROFILE](#) [LOG OUT](#)

[Home](#) [Logs](#) [Uploads](#) [Downloads](#) [CRL](#) [Pubkey](#)

Welcome administrator for PRODUCTION gTLD: **ibm\_test\_rgy**

[Switch to TEST settings](#)  
[Change my administrator password](#)

Point Of Contact information  
POC name: Anton Melumad POC email: nijmehj@nl.ibm.com POC phone: 123456

Technical Point Of Contact information  
POC name: Wim Fabr POC email: POCEmail POC phone: 123456

SMD registration list service  
Registry username: smdr1  
Registry password: Password Password Verify: Password verify  
IP 1: 195.212.29.91 IP 2: 195.212.29.190 IP 3: 195.212.29.82 IP 4: 195.212.29.94 IP 5: 195.212.29.95

LORDN service  
Registry username: lordn1  
Registry password: Password Password Verify: Password verify  
IP 1: 195.212.29.184 IP 2: 195.212.29.190 IP 3: 195.212.29.93 IP 4: 195.212.29.89 IP 5: 195.212.29.88

**DNL List service**  
Registry username: dnl  
Registry password: Password Password Verify: Password verify  
IP 1: 195.212.29.94 IP 2: 195.212.29.88 IP 3: 195.212.29.190 IP 4: 195.212.29.95 IP 5: IP address

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## Testing Claims services: ICANN Certification: Overview

---

ICANN requires Registries to go through a TMDB testing and certification process before using production functionality.

This testing and certification process is described in the "welcome package" you will from ICANN.

Before certification, you should only use the TMDB test functions.



## Testing: ICANN Certification: Tests to be performed

---

For the Registry, the following tests must be performed:

Sunrise:

- Download a SMD Revocation List.
- Upload a Sunrise LORDN file with at least three (3) domain names that have been validated using the “testing SMDs” generated by the Trademark Clearinghouse and retrieve the related LORDN Log files.

Claims:

- Download a DNL list (to be explained in future webinar).
- Upload a Claims LORDN file with at least three domain names; and retrieve the related LORDN log files.

**SMD revoked**

**DNL**

**LORDN**



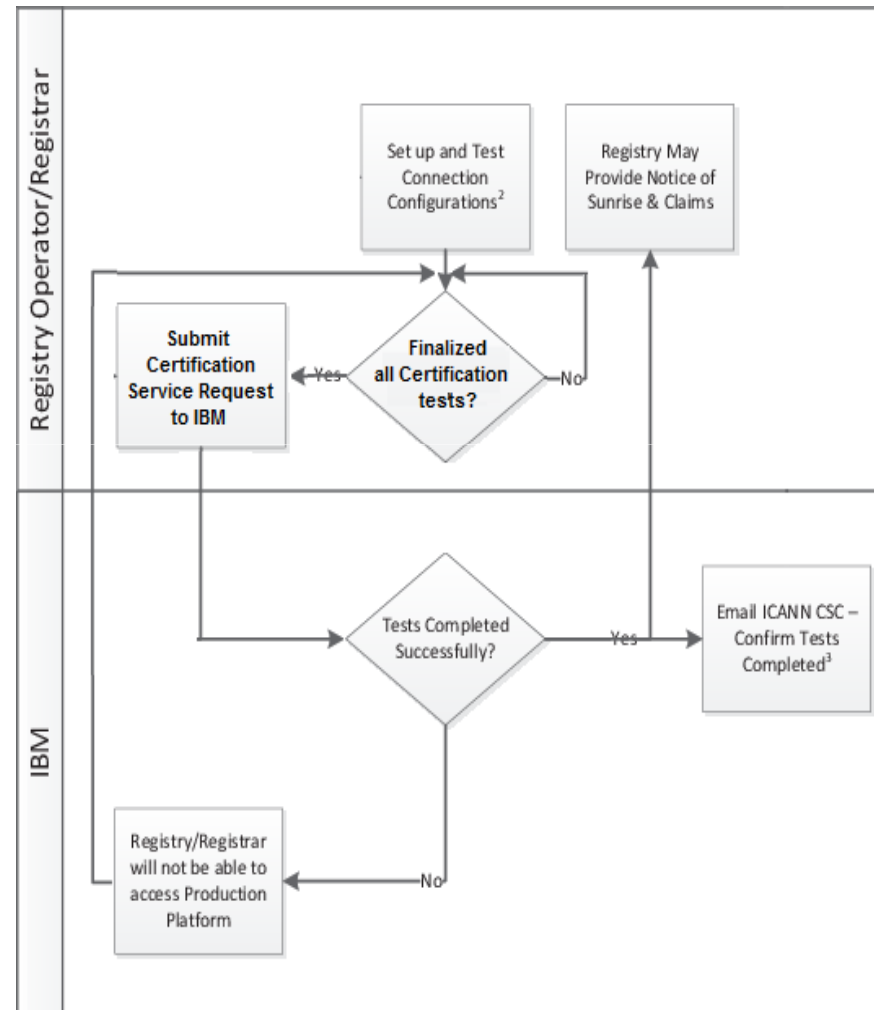
## Testing: ICANN certification: Test validation process

After all the tests have been successfully performed by a Registry, a Service Request must be raised in the IBM Service Portal and successful test evidence attached

IBM will verify the request and will send an email notifying ICANN of successful test completion and update and close the Service Request notifying the requester of the status.

In case of a failure, only the requester will be informed.

More details are available at <http://newgtlds.icann.org/en/about/trade-mark-clearinghouse>



## Testing Claims services: DNL list service

---

Once the DNL list connections have been configured. A test DNL list can be downloaded.

The validity of the DNL list can be verified by a DNL list signature and a public key available from the TMDB system.

A test DNL list can be downloaded from:

<https://test.ry.marksdb.org/dnl/dnl-latest.csv>

A test DNL list signature can be downloaded from:

<https://test.ry.marksdb.org/dnl/dnl-latest.sig>

## Configuring Claims services: DNL list service

---

The DNL List is contained in a CSV-like formatted file that has the following structure:

- first line: <version>,<DNL List creation datetime> Where: + <version>, version of the file, this field MUST be 1. + <DNL List creation datetime>, date and time in UTC that the DNL List was created.
- second line: a header line as specified in [[RFC4180](#)] With the header names as follows: DNL,lookup-key,insertion-datetime
- one or more lines with: <DNL>,<lookup key>,<DNL insertion datetime>  
Where:
  - <DNL>, a Domain Name Label covered by a PRM.
  - <lookup key>, lookup key that the Registry MUST provide to the Registrar.
  - <DNL insertion datetime>, datetime in UTC that the DNL was first inserted into the DNL List. The possible two values of time for inserting a DNL to the DNL List are 00:00:00 and 12:00:00 UTC.

## Configuring Claims services: DNL list service

---

The lookup key has the following format:

<YYYY><MM><DD><vv>/<X>/<X>/<X>/<Random bits><Sequential number>

where:

- YYYY: year that the TCN was generated.
- MM: zero-padded month that the TCN was generated.
- DD: zero-padded day that the TCN was generated.
- vv: version of the TCN, possible values are 00 and 01.
- X: one hexadecimal digit [0-9A-F]. This is the first, second and third hexadecimal digit of encoding the <Random bits> in base16 as specified in [[RFC4648](#)].
- Random bits: 144 random bits encoded in base64url as specified in [[RFC4648](#)].
- Sequential number: zero-padded natural number in the range 0000000001 to 2147483647

## Configuring Claims services: DNL list service

---

Example for DNL List:

1,2012-08-16T00:00:00.0Z

DNL,lookup-key,insertion-datetime

example,2013041500/2/6/9/rJ1NrDO92vDsAzf7EQzgjX4R0000000001,2010-07-14T00:00:00.0Z

another-example,2013041500/6/A/5/aIJAqG2vI2BmCv5PfUvuDkf40000000002,2012-08-16T00:00:00.0

anotherexample,2013041500/A/C/7/rHdC4wnrWRvPY6nneCVtQhFj00000000003,2011-08-16T12:00:00.0Z

## Configuring Claims services: DNL list service

---


- Each Registry must download at least each day, and maximum two times a day (each 12 hours), an update list of labels submitted to claims.
- The URLs of the interface to retrieve the latest file does not require knowledge of the file name
- Depending on UTC time the interface should return either `dnl_DDMMYYYY000000.csv` or `dnl_DDMMYYYY120000.csv` and the corresponding `.sig` signature files
- Registry must access these https URL with basic authentication (login – password).

## Testing Claims services: public key for DNL list service

- The public key can be downloaded from:

<https://marksdb.org/tmdb/public/pubkey>

- Or can be accessed via the TMDB web interface as shown on the right
- This public key can be used for validation of all downloaded TMDB files



-----BEGIN PGP PUBLIC KEY BLOCK-----  
 Version: GnuPG v2.0.14 (GNU/Linux)

```
mQENBFHawggBCADUpTc5cW8aOrYmfkgERx0yufnAhnEnuXprn0+KLxYg+3zgXGQ9
SRJzNHPZfJGIApmyfwhS+HBX8xIT1DH5ZFLKN2Irr0cv0oTa9hFwFaFbZn+29L3
L0TZfQLUFZF2LTuxdre03a1NoN1ZOF+yoSPT3PKWacRWiWN+oBleuIAkxuFy0GcH
tU1929cRdV2NMn11gHk7RCS0quZ2VkcDFdvWwJUyeM66Ya0NePJb1bLYqen/Z1sA
mJ1cXRkzkF6DnPouDetFu5yonkl+1j+ICBwzBE2NpfHgF3+Er/WaVoGE+hTaaK2k
mp9+x6S+QJqa2Rd5Ru+Kr98BEZDXnwrinki9ABEBAAG0LHN1cHBvcnQgYXQgbWYy
a3NkYi5vcmcgPHN1cHBvcnRabWFya3NkYi5vcmc+iQE4BBMBAgAiBQJR2sIIAhsD
BgsJCACDAgYVCAIJCgsEFgIDAQIeAQIXgAAKCRBbwuW5avDD9pDnB/4mUHnDs/kJ
dIYZ8bTUuJoIb/+61ZaJXQi81FqgWdRs6iOyzQYoH+xo9iJd+RzXU8dZPKDIgKhT
I5S9NkEWto6y+mXNGLQd213606VODyFU6E834wbzVdJcODCqN2X4+v0cnzc2qHd
IMyGKKsxx4QDRiFu+1mZUF2rz54I9Lm17MEpJCiMPgPeM3Vf7V0r74neviaeZ3
hhiHH+dNXO1/za1R4+Q27wQSVWKJHZtUV3g4pCQuOimGfVN9HSQtefQg4nv9jB2S
JpwsPWYKf4GRkBwbh05V81KwAiKUr14JB7dWx2DfTifhWRAqM06Tuqrb/jHDDzvs
qF/5nD3PwxYuuQENBFHawggBCADYr3ntr0Z8DdrCSropUGF3AYYSEPrriuS6Td2t
eVnGY7iJstQdz1cgbeDrWmlPltR3NdXmFF2/Erbs5ayjFdkG/GWTr5kqOZccPwEc
4LVIV88OP1VZ1x3OArBUMCBvVOPjPSa1aJ3ThHurRQ2uKyCD+5nyx1qMczdrCvQ
UQxOJHYDz2kP53LAqe07Lx6qHQUKOP+dZ5FdZE/y1OYrhCuvygggYbNZz3904sZ1
SJudhOLr7aIzgz7ZZDsCMtoRDi+HupRuVYg3ty6IiUtIhdIS8FUAEIh5hVgmM/Uq
exD/n2oVskzfyCEGpHYmlB+IiVYYgI329Ie6pxUO2J1/3zMDABEBAAGJAR8EGAEC
AAkFALHawggCGwACGkQW8LluWrwW/YxqAf/fpgGnbKw7GeZ6/DiGCaz7uoDmxL+
mfHO/8ePabdEIf+adxfaPedo6r+1SLAPbSghD3UUNLad1wk2Y1Wcb3E5wRTbHGwG
5hwBESKPR15Hbi+raULWssMBM21JrMddMRDsFdFxdyht902Q2nurZsco8nyPZ/Zh
+r6v187L9JmyMjUMrcOOIyYHDOMTuZweE8duyTLESBqaI+60KvCmiGFN12q6HSwQ
kPFDerVKEZ3N484K2zIYW+9bJigrAJvQtfx49V9sVnVe8WxDBBSBjaUiIMQz1ogE
pDV/Vh01xy/qrOjZRGCBG7rNB9y97iRsdIqu6CPmDHgBBIx5nyZnuR0qEw==
=ZA9c
-----END PGP PUBLIC KEY BLOCK-----
```

## Testing Claims services: CNIS service for Registrars

---

**Registrars can use the Lookup Keys contained in the DNL List to download the CNIS files.**

A Registrar can download a CNIS file directly via the URL on the right using the 'lookup key'.

Registrar can download a **CNIS file** using the 'lookup key':

**<https://test.tmcnis.org/cnis/<lookupkey>>**



## Testing Claims services: LORDN service

---

### Testing Claims LORDN file connections

Once the LORDN connections have been configured, they can be tested by uploading test Sunrise LORDN files.

Note that a test Claims LORDN file needs to be uploaded to a different URL as a test Sunrise LORDN file

A test **Claims** LORDN file can be uploaded to:

<https://test.ry.marksdB.org/LORDN/<tid>/claims>

## Testing Claims services: LORDN service

---

### LORDN file format

The LORDN file is a CSV-like formatted file that has the following structure:

- Header (1<sup>st</sup> line)
- Column name list (2<sup>nd</sup> line)
- One or more data lines (from line 3 onwards)

### Sample file:

```
1,2013-09-13T07:20:00.0Z,3
roid, domain-name, notice-id, registrar-id, registration-datetime, ack-datetime, application-datetime
CL0031-VL1, mynews.rgy3, 8625fe6600000000000000006065, 999, 2013-09-13T06:20:00.0Z, 2013-09-13T02:10:00.0Z
CL0032-VL1, localnews.rgy3, e70bb95500000000000000006099, 999, 2013-09-13T06:20:00.0Z, 2013-09-13T02:10:00.0Z
CL0033-VL1, news.rgy3, b07f4d5f00000000000000006125, 999, 2013-09-13T06:20:00.0Z, 2013-09-13T02:10:00.0Z
```

## Testing Claims services: LORDN service

---

### LORDN file format

#### Header

- File version (must always be 1)
- File creation date (UTC)
- Number of domain names allocated on <registration-datetime>

#### Sample file:

```
1,2013-09-13T07:20:00.OZ,3
roid, domain-name, notice-id, registrar-id, registration-datetime, ack-datetime, application-datetime
CL0031-VL1, mynews.rgy3, 8625fe6600000000000000006065, 999, 2013-09-13T06:20:00.OZ, 2013-09-13T02:10:00.OZ
CL0032-VL1, localnews.rgy3, e70bb95500000000000000006099, 999, 2013-09-13T06:20:00.OZ, 2013-09-13T02:10:00.OZ
CL0033-VL1, news.rgy3, b07f4d5f00000000000000006125, 999, 2013-09-13T06:20:00.OZ, 2013-09-13T02:10:00.OZ
```

## Testing Claims services: LORDN service

---

### LORDN file format

Column name list: comma separated list of 7 column names for below data lines

roid:	Repository Object Identifier
domain-name:	<label>.<tld>
notice-id:	Trademark Claim Notice ID = Checksum (8 chars) + TMDB Identifier
registrar-id:	IANA ID of the Registrar
registration-datetime:	domain allocation timestamp (UTC)
ack--datetime:	TM Notice acknowledgment timestamp (UTC)
application-datetime:	(optional) Application submission timestamp (UTC)

### Sample file:

```
1,2013-09-13T07:20:00.OZ,3
roid, domain-name, notice-id, registrar-id, registration-datetime, ack-datetime, application-datetime
CL0031-VL1, mynews.rgy3, 8625fe6600000000000000006065, 999, 2013-09-13T06:20:00.OZ, 2013-09-13T02:10:00.OZ
CL0032-VL1, localnews.rgy3, e70bb95500000000000000006099, 999, 2013-09-13T06:20:00.OZ, 2013-09-13T02:10:00.OZ
CL0033-VL1, news.rgy3, b07f4d5f00000000000000006125, 999, 2013-09-13T06:20:00.OZ, 2013-09-13T02:10:00.OZ
```

## Testing Claims services: LORDN service

---

### LORDN Syntax Check

Before a LORDN file can be processed it is checked for valid syntax:

- Header is present and complete
- Column headers are correct
- Label data matches expected data types
- Mandatory data is present
- Etc.

If the check fails, the 400 HTTP response is returned containing details about offending lines in the response body, e.g.

```
Invalid format, line 3
```

## Testing Claims services: LORDN service

---

The results of LORDN processing are available in LORDN Log files.

These are simple text files that contain processing status for the entire LORDN file as well as for individual label data.

Sample LOG file content:

```
1,2013-09-10T08:55:02.0Z,2013-09-10T08:50:17.7Z,0000000000000013423,accepted,warnings,3
roid,result-code
CL0001-VL1,2000
CL0002-VL1,2000
CL0003-VL1,3603
```

**Status codes:**  
**2xxx: OK**  
**3xxx: warnings (line ignored)**  
**4xxx: errors (file is rejected)**

## Testing Claims services: LORDN service

---

LORDN Log Files can be retrieved using the URL provided in the “Location” header of HTTP/202 response issued if the interface was able to receive the LORDN file and the syntax of the LORDN file is correct, e.g.:

```
https://test.ry.marksdb.org/LORDN/<tld>/claims/000000000000127/result
```

The LORDN log files will be available within 30 minutes of the LORDN file upload. You should not attempt to retrieve the log more than once a minute.

## Configuring the LORDN service (sunrise): LORDN rules

---

Several rules for uploading a LORDN file:

- Based on the timers used by TMVs and the TMDB, the RECOMMENDED maximum frequency to upload LORDN files from the Registries to the TMDB is every 3 hours.
- It is RECOMMENDED that Registries try to upload at least two LORDN files per day to the TMDB with enough time in between, in order to have time to fix problems reported in the LORDN Log file.
- The Registry SHOULD upload a LORDN file only when the previous LORDN file has been processed by the TMDB and the related LORDN Log file has been downloaded and processed by the Registry.



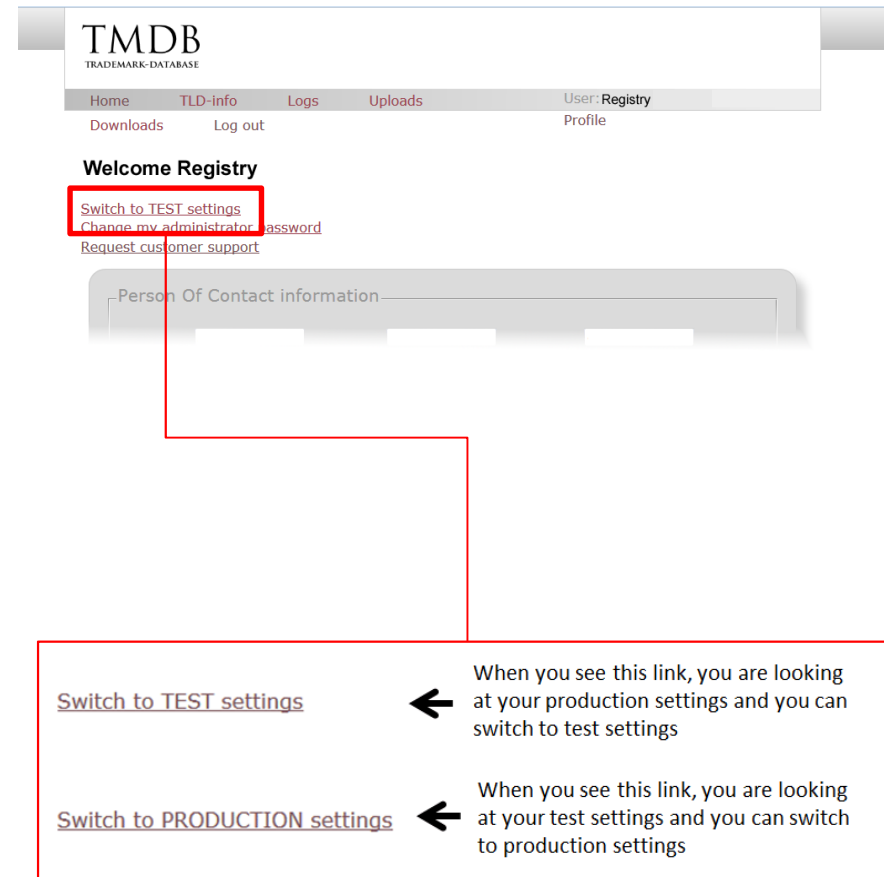


## ICANN certification for production : Configure production settings

Once you have obtained ICANN certification, you can use the production environment.

You can now:

- Configure your production settings to upload LORDN files to the production environment



The screenshot shows the TMDB (Trade Mark DataBase) user interface. At the top, there is a navigation bar with links for Home, TLD-info, Logs, Uploads, Downloads, Log out, and User: Registry Profile. Below this is a 'Welcome Registry' section with three links: 'Switch to TEST settings' (highlighted with a red box), 'Change my administrator password', and 'Request customer support'. A red line connects the 'Switch to TEST settings' link to a callout box below.

**Switch to TEST settings** ← When you see this link, you are looking at your production settings and you can switch to test settings

**Switch to PRODUCTION settings** ← When you see this link, you are looking at your test settings and you can switch to production settings

## Introduction - Contents of this webinar

---

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Configuring Claims services

Testing Claims services

**Upcoming webinars**

Supporting material

## Upcoming webinars: Overview

Conducted webinars: 1, 2, 3

Upcoming webinars: 4 (next week), and 5

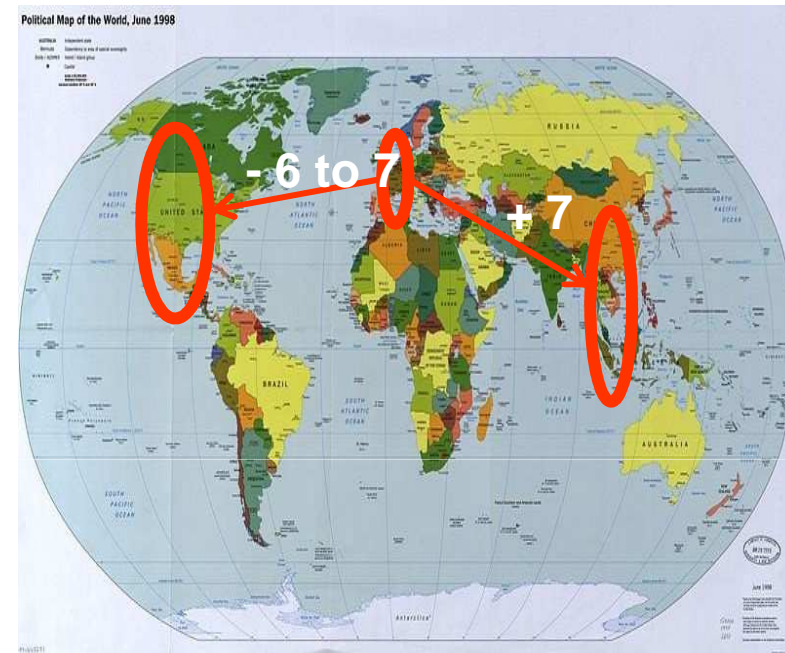
Refer to the ICANN site for schedule details.

	Registrars	Registrars
	<b>Webinar 1</b>	
	<ul style="list-style-type: none"> <li>• Introduction to the TMDB</li> </ul>	
Sunrise	<b>Webinar 2</b>	<b>Webinar 3</b>
	<ul style="list-style-type: none"> <li>• Register with the TMDB &amp; managing your profile</li> <li>• Sunrise test functions</li> </ul>	<ul style="list-style-type: none"> <li>• Register with the TMDB &amp; managing your profile</li> <li>• Sunrise test functions</li> </ul>
Claims	<b>Webinar 4</b>	<b>Webinar 5</b>
	<ul style="list-style-type: none"> <li>• Claims test functions</li> </ul>	<ul style="list-style-type: none"> <li>• Claims test functions</li> </ul>

## Upcoming webinars: Timing

Given the time zones to cover, each webinar is scheduled twice:

- Wednesdays even weeks at 15:00 – 17:00 UTC
- Wednesday odd weeks at 08:00 – 10:00 UTC



## Introduction - Contents of this webinar

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Introduction

Revising Sunrise services

Configuring Claims services

Testing Claims services

Upcoming webinars

**Supporting material**

## Supporting Material

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The draft TMCH functional specification

<http://tools.ietf.org/html/draft-lozano-tmch-func-spec-06>

ICANN TMDB webpages with amongst others TMDB manuals, FAQs, explanation of SMD files, details about the TMDB registration process

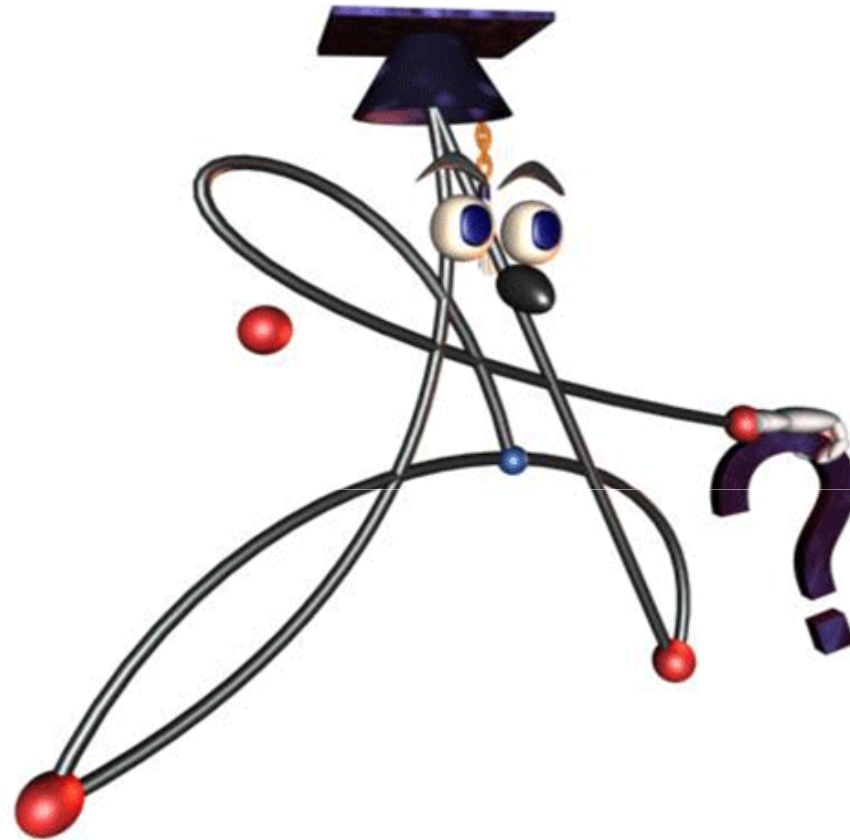
<http://newgtlds.icann.org/en/about/trademark-clearinghouse/scsvcs>

The TMDB webinar recordings:

<http://newgtlds.icann.org/en/announcements-and-media/webinars>

The TMDB webinar announcements can be found at:

<http://newgtlds.icann.org/en/announcements-and-media/webinars>



**Questions?**

## Version management

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Version	Date	Changes
0.1	12-8-2013	Initial version
0.2	12-9-2013	Changed corresponding changes in earlier webinars
0.3	16-9-2013	Update
0.4	17-9-2013	Added Sunrise revision
0.5	18-9-2013	Corrected LORDN URL

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