

WHOIS for Tags – final implementation

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1. Introduction

In December 2004 the Policy Advisory Board (PAB) agreed to a proposal from the Executive for a WHOIS for Tags. Since then considerable work has been done on our WHOIS servers to enhance the data protection they provide and this project has taken a back seat. Now that work is completed we are ready to implement the WHOIS for Tags.

The initial proposal to the PAB only contained a rough outline of the output. This document provides firm details of the output and makes some new recommendations, covering anti-abuse, private access and linked tags.

2. New recommendations

2.1 Public rate limits and intended use.

The information supplied in the WHOIS for Tags is almost entirely supplied by the tag holders and intended for the use of their customers and so by its very nature is public data. Having said that, it still provides a view of a key customer database, which is not something a commercial organisation would normally make public.

These considerations need to be balanced with the intended use of this service, which is for registrants to be able to find information on tag holders from a single location, and for tag holders to be in control of that information. So, a registrant who uses this may well wish to look at the information on a number of tag holders at any one time.

This leads to the conundrum that any attempts to protect the data privacy might be impractical, given the small size of this data set. This is because anti-abuse limits are generally set to be a small proportion of the data set and with a data asset this small they would lead to such low limits that the system would be unusable.

The final consideration is that to protect the system from denial of service and ensure a reasonably constant response rate, a set of rate limits must be applied, though they may be substantially higher than is needed for data privacy protection.

So the proposed compromise is to implement limits that at the very least protect the operation of the system and if possible prevent data harvesting, though without compromising fair use by registrants.

2.1.1 Policy proposal

The intended use of the public WHOIS for tags is for registrants and potential registrants to find information about tag holders. This system should be protected to ensure its operation and prevent data harvesting, though without compromising fair use by registrants.

2.1.2 Operational details

These operational details are supplied for information only and do not form part of the proposal.

The initial proposed limits are

- A maximum of 2 queries per second.
- A maximum of 30 queries in any 24 hour period.

As with all of our limits, our standard anti-avoidance clause will apply and so queries from blocks of IP addresses may be automatically aggregated for the purposes of rate limiting.

2.2 Private use by tag holders and intended use

There are a number of reasons why more detailed information on other tag holders would be useful for tag holders and this is something that has been asked for repeatedly over the years. The main reason cited is to enable the following registrant transaction to work more smoothly

“A registrant has a domain with tag holder A but wishes to move to tag holder B. They go to the web site of B and enter their domain name. B looks up the domain, via the DAC and then looks up the tag of the domain from the WHOIS for tags. The public information about A is then displayed to the registrant along with a sample email to send to ask for a tag change.”

Other requests have been for a mechanism that allows the exchange of private information between tag holders, such as priority telephone numbers. However that is out of scope for this service and this document.

Our proposal is to have a private WHOIS2 for tags, with different rate limits from the public version, but exactly the same output, that enables this quality of interaction. The privacy is likely to be maintained by restricting access to pre-configured IP addresses.

It is clear, from the volumes of changes processed by many tag holders that reasonable limits to allow this service to be of use would not be sufficient to prevent data harvesting by tag holders. As a result the intended use restrictions will need to be quite tight. As tags are currently available freely to anyone requesting it will also be necessary to restrict access to customers who are both tag holders and members so that people do not take up a free tag just to get access to this data.

2.2.1 Policy proposal

There is to be a private WHOIS2 for tags, with rate limits set only to protect the operation of the system, but not to limit the fair use of it by tag holders. The intended use of this service is for tag holders to look up public information about other tag holders in one place and pass on to their customers as needed.

2.2.2 Operational details

These operational details are supplied for information only and do not form part of the proposal.

The intended use will clearly forbid any harvesting of the data returned to create a database of tag holders and also require tag holders to prevent their customers from doing the same.

This will operate in the same technical manner as the WHOIS2, whereby the tag holders must send the IP address of the originating client as part of the query. This enables us to detect and combat distributed abuse that uses the systems of multiple tag holders to gain additional queries.

The initial proposed limits for the WHOIS2 for tags gateway are:

- A maximum of 100 queries per second.
- A maximum of 10,000 queries in any 24 hour period.

2.3 Linked tags

We are seeing an increasing number of tag holders using multiple tags, either for brand differentiation, as a result of acquisition or for technical separation. In addition we are increasingly aware that the issue of linked tags is of concern to members and tag holders, either when considering voting rights or the potential abuse of our systems.

Our internal systems allow us to link tags for a number of reasons and over time new reasons are likely to develop. This can either be self-identified, such as when multiple tags are on one account or imposed by us as the result of an investigation. The general principle though remains the same, which is that tags are linked when they are under common control or operating together.

We believe the most suitable place to publish this information is in the WHOIS for Tags, however it would not be appropriate to provide a reason by each linked tag that differentiated between self-declared and imposed. A tag holder can of course take advantage of the public notes section of the output to include information about their other tags if they wish.

2.3.1 Policy proposal

The WHOIS for Tags (both public and private) should list linked tags, for each tag displayed, but without any indication as to why those tags are linked.

2.3.2 Operational details

These operational details are supplied for information only and do not form part of the proposal.

The detailed explanation of the WHOIS for Tags, used in explanatory material, will state that this section shows 'tags that are under common control or operating together'.

3. Sample output

The following output has now been finalised and is included for completeness. It is not the subject of any recommended policy proposal and is for information only.

```
Tag:
  <tag>

Tag holder:
  <account name>

Trading as:
  <trading as>

Tag holder's address:
  <public address>

Tag holder contact details:
  Tel:    <public telephone number>
  Fax:    <public fax number>
  Email:  <public email>
  www:    <public URL>

Notes:
  <public notes>

Linked tags:
  <tag>
  ...
  <tag>
```

4. Recommendations

The PAB is asked to agree the following resolution:

“The PAB resolves to recommend that the WHOIS for Tags be implemented in accordance with the additional policy proposals of

- The intended use of the public WHOIS for tags is for registrants and potential registrants to find information about tag holders. This system should be protected to ensure its operation and prevent data harvesting, though without compromising fair use by registrants.
- There is to be a private WHOIS2 for tags, with rate limits set only to protect the operation of the system, but not to limit the fair use of it by tag holders. The intended use of this service is for tag holders to look up public information about other tag holders in one place and pass on to their customers as needed.
- The WHOIS for Tags (both public and private) should list linked tags, for each tag displayed, but without any indication as to why those tags are linked.