ARIN DIRECTORY SERVICES & DATA
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1. SUMMARY

The discussions concerning WHOIS and ARIN Directory Services have brought to the forefront a need to examine the data used by ARIN. This in turn can be used to study directory services from a requirements based perspective and thus determine what data ARIN should collect and how ARIN should maintain and use the data. These discussions are the result of policies or considerations for policies in ARIN and other RIR regions, growing interest in directory services data by various government and state agencies, and broader interest by the community. To be thorough and inclusive this endeavor must include not only all interested stakeholders in the ARIN region, but also ARIN staff. This paper looks at ARIN data from several perspectives and identifies questions that need to be discussed. A clear set of requirements is needed in order to focus the policy discussions, thus ensuring that the data collected by ARIN provides the appropriate and accurate information to interested parties in a timely manner.

2. WHY ARIN COLLECTS DATA

Data is captured in the course of business as a result of activity in two areas:

2.1. Internet Number Resource Management

2.1.1. Recording Transaction Activity

Data created in the course of a transaction between ARIN and one of its clients.

2.1.2. Recording Utilization Information

Data reported to ARIN by its clients in order to substantiate utilization of Internet number resources.

2.2. DNS Administration

Data created to operate the reverse DNS.

3. WHOSE DATA IS IT?

Data in any data base has an owner, a custodian, and a consumer. The data owner is responsible for accuracy. The data custodian is responsible for housing the data, maintaining it, and publishing reports from the data. The data consumer is a party that uses the data for a purpose that is established by the owner. The owner and the custodian must be mutually responsive in order for the consumers of the data to be able to have the appropriate and accurate

information when it is needed. In regard to ARIN data, the owner, custodian, and consumer are:

3. 1. Internet Number Resource Management

3.1.1. Transaction Activity.

3.1.1.1 Owner – ARIN

ARIN is the owner as ARIN verifies the data during the course of allocating/assigning Internet number resources.

3.1.1.2 Custodian – ARIN

ARIN is the custodian as it performs the custodial tasks.

3.1.1.3 Consumer – General Public

The data is reported to the General Public by ARIN to establish the unique and exclusive user of the Internet number resource. This information is reported through ARIN directory services to the General Public so that interested parties can determine the unique and exclusive user of the Internet number resource. ARIN reports this information for non-commercial purposes such as authenticating the exclusive user of the resource by those concerned with proper use of the resource. These consumers have been identified as those concerned with operating the Internet, enforcing laws regarding the operation of the Internet, and studying disposition of Internet number resources. These consumers are identified by the stakeholders in the ARIN region through the policy process.

3.1.2 Utilization Information

3.1.2.1 Owner – Recipient of the Internet number resource from ARIN.

The Internet number resource recipient is the owner of the data as it establishes the validity of the data as a result of its use of the resource or subsequent allocation of the resource to one of its clients.

3.1.2.2 Custodian – ARIN

ARIN is the custodian as it performs the custodial tasks.

3.1.2.3 Consumer – ARIN

ARIN is the consumer as the data is reported to ARIN by the recipient of the resource so ARIN can verify the utilization of the resource. This is usually done

during the process of the recipient requesting a subsequent allocation of a similar type of Internet number resource. ARIN reports this data to the general public by its directory services. Consequently, the general public has, over time, become a de facto consumer of this data although it has never been identified as a consumer of the data by the policy process. These consumers are the same type of consumers identified as for the transaction activity data.

3.2 DNS Administration

3.2.1 Owner – ARIN and the recipient of the Internet number resource from ARIN.

ARIN is the owner of DNS administration data pertaining to Internet number resources that have been allocated to it by the IANA. The Internet number resource recipient is the owner of DNS administration data pertaining to the resources it has received from ARIN.

3.2.2. Custodian – ARIN

ARIN is the custodian as it performs the custodial tasks.

3.2.3. Consumer – General Public

The data is reported to the General Public by ARIN identify information recorded during the administration of reverse DNS domains. This information is reported through ARIN directory services to the General Public so that interested parties can determine information relevant to the administration of reverse DNS domains. ARIN reports this information for non-commercial purposes such as authenticating reverse DNS domain information. These consumers have been identified as those concerned with operating the Internet, enforcing laws regarding the operation of the Internet, and studying disposition of Internet number resources. These consumers are identified by the stakeholders in the ARIN region through the policy process.

4. *WHAT SHOULD BE CONSIDERED IN FUTURE DIRECTORY SERVICES?*

There are several questions that need to be answered and considered in reshaping ARIN Directory Services. The questions below are not an exhaustive list. Given the current discussions of public versus private data, these views will require thorough definition as part of the strategic plan under which ARIN Directory Services should be formulated.

4.1. General Questions

- What should be the consequence of failing to maintain accurate data?
- What should be the consequence of inserting fraudulent data?
- What should be the consequence of using the data for other than its intended purpose?

4.2. Transaction Activity Information

- Should all of the data collected by ARIN that directly concerns a transaction between ARIN and its clients be made public?
- Who are the bona fide consumers of the data?

4.3 Utilization Information

- What information is required by ARIN to effectively determine allocation?
- How should it be collected?
- Should it be made public?
- Are there valid consumers besides ARIN?
- If there are consumers other than ARIN, should additional information be collected by ARIN to support their consumption needs? For example, if personal/organizational information about clients of ARIN's clients is not needed on a general basis for utilization verification, should ARIN collect this data? Should it be publicly reported?

4.4. DNS Administration

- What information is required by ARIN to effectively support the administration and operation of reverse DNS domains?
- How should it be collected?
- Should it be made public?
- Who are the bona fide consumers of the data?