RDAP (Registry Data Access Protocol) is a directory service for Internet number resources designed by the Internet Engineering Task Force (IETF) as a successor to the Whois protocol. It is an alternative, Representational State Transfer (REST) web service that provides access to information about domain names, Autonomous System Numbers (ASNs), IP addresses, and related records. It serves as a global protocol by querying resource registration data from Regional Internet Registries (RIRs) and Domain Name Registries (DNRs).

Advantages over Whois
RDAP is designed to address a number of shortcomings in the existing Whois service.

<table>
<thead>
<tr>
<th>RDAP</th>
<th>Whois</th>
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<tbody>
<tr>
<td>✓ HTTP-based REST-style protocol with standardized responses specified in JSON</td>
<td>× Text-based protocol, utilizing a specialized protocol and port</td>
</tr>
<tr>
<td>✓ Response data objects are easily translated into languages other than English</td>
<td>× Response data objects may not be translated into languages other than English</td>
</tr>
<tr>
<td>✓ Responses offer direct referrals to other RIRs</td>
<td>× Defines no queries or responses, and interaction with DNRs and RIRs can vary significantly</td>
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</table>
How RDAP Works

RDAP uses the RESTful web technologies to make access to registration data as robust as possible. These are the same set of technologies used by modern Internet services such as Twitter, Facebook, Google, Amazon, and more.

**ARIN’s RDAP Bootstrap Server**

Query bootstrapping is the process of determining to which RIR (or DNR) a query should be sent. This process can be time-consuming, so ARIN offers a bootstrapping service to make RDAP queries as fast as possible. This bootstrap service preloads and indexes all the necessary information. All you need to do is send an RDAP query to the bootstrapping service, and ARIN will redirect the query to the appropriate place.

Should you wish to operate your own bootstrap server, ARIN’s is open source and available via GitHub.

**How Do I Use ARIN’s RDAP service?**

The correct URL preceding any query to ARIN’s RDAP service is https://rdap.arin.net/bootstrap/. Alternatively, you may use https://rdap.arin.net/registry/ to query without using ARIN’s bootstrap server.

Visit https://www.arin.net/resources/rdap.html to learn how to correctly configure your searches for domains, IP addresses, etc.

Find Out More!

For more information and help using RDAP, visit: www.arin.net/resources/rdap.html

The following IETF Internet Requests for Comments (RFCs) offer full details and specifications about RDAP:

- **RFC 7480** - HTTP Usage in the Registration Data Access Protocol (RDAP)
- **RFC 7481** - Security Services for the Registration Data Access Protocol (RDAP)
- **RFC 7482** - Registration Data Access Protocol (RDAP) Query Format
- **RFC 7483** - JSON Responses for the Registration Data Access Protocol (RDAP)
- **RFC 7484** - Finding the Authoritative Registration Data (RDAP) Service

We also recommend subscribing and posting to the ARIN Tech Discuss mailing list:

http://lists.arin.net/mailman/listinfo/arin-tech-discuss

ARIN Tech Discuss archives may be viewed at:

http://lists.arin.net/pipermail/arindiscuss

Other advantages of RDAP are:

- A machine-readable representation of registration data
- Differentiated access
- Structured request and response semantics
- Internationalization
- Extensibility
- Query bootstrapping