This reference card lists query options (flags) available for the RIPE Database:

- Queries using primary and lookup keys
- Inverse queries
- IP address lookups
- Miscellaneous queries
- Database help
- List of commonly used flags

Note: most email addresses are hidden in the whois query results. Use the `-B` flag to change this when making a query.

The flags in this reference card work on both the RIPE Database web interface and the command line client. The web interface is available at: http://www.db.ripe.net/whois

The command line client is available to download at: http://www.ripe.net/data-tools/db/tools

For more documentation, see: http://www.ripe.net/data-tools/support/documentation

The RIPE Database contains contact and registration information for networks in the RIPE NCC service region.

For more information about the RIPE Database, see: www.ripe.net/db

This RIPE Database Queries Reference Card can also be found online at: www.ripe.net/data-tools/support/documentation/queries-quick-ref

### Commonly Used Flags

<table>
<thead>
<tr>
<th>Flag</th>
<th>Argument</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>-i</code></td>
<td>person</td>
<td>NIC handle</td>
</tr>
<tr>
<td><code>-i</code></td>
<td>mnt-by</td>
<td>Maintainer name</td>
</tr>
</tbody>
</table>

**Inverse Lookups**

<table>
<thead>
<tr>
<th>Flag</th>
<th>Argument</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>-i</code></td>
<td>person</td>
<td>Objects with matching <code>admin-c</code>, <code>tech-c</code>, <code>zone-c</code> or <code>author</code>.</td>
</tr>
<tr>
<td><code>-i</code></td>
<td>mnt-by</td>
<td>Objects with a matching <code>mnt-by</code>.</td>
</tr>
</tbody>
</table>

**Narrowing Down or Broadening Search**

<table>
<thead>
<tr>
<th>Flag</th>
<th>Argument</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>-r</code></td>
<td></td>
<td>Disables recursive search for contact information after retrieving the objects that match the lookup key.</td>
</tr>
<tr>
<td><code>-T</code></td>
<td></td>
<td>Restrictions the type of objects to look up in the query.</td>
</tr>
<tr>
<td><code>-resource</code></td>
<td></td>
<td>Specifies that the server should perform lookups in all available source database(s). See also <code>-q sources</code> query.</td>
</tr>
</tbody>
</table>

### Database Help

<table>
<thead>
<tr>
<th>Flag</th>
<th>Argument</th>
<th>Returns</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>-t</code></td>
<td>object type</td>
<td>Template for the specified object type.</td>
</tr>
<tr>
<td><code>-V</code></td>
<td>object type</td>
<td>Verbose template for the specified object type.</td>
</tr>
<tr>
<td><code>-q</code></td>
<td>help</td>
<td>List of query options available in the database.</td>
</tr>
<tr>
<td><code>-q</code></td>
<td>sources</td>
<td>Current set of sources along with the information required for mirroring.</td>
</tr>
<tr>
<td><code>-q</code></td>
<td>version</td>
<td>Current version of the server.</td>
</tr>
<tr>
<td><code>-q</code></td>
<td>types</td>
<td>A list of all available object types.</td>
</tr>
<tr>
<td><code>-V</code></td>
<td>client tag</td>
<td>Sends information about the client to the server.</td>
</tr>
</tbody>
</table>
Queries Using Primary and Lookup Keys

Example: whois -h whois.ripe.net 193.0.1.17
These often return referenced contact objects (person/role/irt/organisation) where appropriate.

<table>
<thead>
<tr>
<th>Lookup key</th>
<th>Objects returned by query</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address prefix or range</td>
<td>IPv4 – Most specific inetnum and/or route. IPv6 – Most specific inetnum and/or route6.</td>
</tr>
<tr>
<td>Single address</td>
<td>IPv4 – Most specific inetnum and/or route and inet-rtr containing the address. IPv6 – Most specific inetnum and/or route6 and inet-rtr containing the address.</td>
</tr>
<tr>
<td>Network name</td>
<td>All inetnum and inetnum objects with a netname containing the name specified in the query.</td>
</tr>
<tr>
<td>Person or role name</td>
<td>All person and role objects with a person or role attribute containing the name specified in the query.</td>
</tr>
<tr>
<td>NIC handle</td>
<td>person or role with a matching nic-hdl.</td>
</tr>
<tr>
<td>Organisation name</td>
<td>All organisation objects with an org-name containing the name specified in the query.</td>
</tr>
<tr>
<td>Organisation ID</td>
<td>organisation with a matching primary key.</td>
</tr>
<tr>
<td>Maintainer name</td>
<td>mntner with a matching primary key.</td>
</tr>
<tr>
<td>IRT name</td>
<td>irt with a matching primary key.</td>
</tr>
<tr>
<td>AS Number</td>
<td>aut-num object with a matching aut-num and associated as-block.</td>
</tr>
<tr>
<td>AS Number – AS Number</td>
<td>as-block whose primary key matches or fully contains the query range.</td>
</tr>
<tr>
<td>Set name</td>
<td>as-set, filter-set, peering-set, route-set or rtr-set with a matching primary key.</td>
</tr>
<tr>
<td>Domain/reverse domain</td>
<td>domain or inet-rtr with a matching primary key.</td>
</tr>
<tr>
<td>Route/route6</td>
<td>Exact match or less specific route/route6 object and exact match or less specific inetnum/inetnum object.</td>
</tr>
<tr>
<td>Email</td>
<td>person, role and organisation objects with a matching email.</td>
</tr>
<tr>
<td>Key-cert</td>
<td>key-cert with a matching primary key.</td>
</tr>
<tr>
<td>Router interface address</td>
<td>inet-rtr with an /addr containing the IPv4 or IPv6 address specified in the query.</td>
</tr>
</tbody>
</table>

Inverse Queries

Example: whois -h whois.ripe.net -i person RD132-RIPE

<table>
<thead>
<tr>
<th>Flag</th>
<th>Alt. flag</th>
<th>Lookup key</th>
<th>Objects returned by query</th>
</tr>
</thead>
<tbody>
<tr>
<td>-i ac</td>
<td>-i admin-c</td>
<td>NIC handle</td>
<td>Objects with a matching admin-c.</td>
</tr>
<tr>
<td>-i tc</td>
<td>-i tech-c</td>
<td>NIC handle</td>
<td>Objects with a matching tech-c.</td>
</tr>
<tr>
<td>-i zc</td>
<td>-i zone-c</td>
<td>NIC handle</td>
<td>Objects with a matching zone-c.</td>
</tr>
<tr>
<td>-i pc</td>
<td>-i ping-hdl</td>
<td>NIC handle</td>
<td>Objects with matching ping-hdl.</td>
</tr>
<tr>
<td>-i ah</td>
<td>-i author</td>
<td>NIC handle</td>
<td>Objects with matching author.</td>
</tr>
<tr>
<td>-i pn</td>
<td>-i person</td>
<td>NIC handle</td>
<td>Objects with a matching admin-c, tech-c, zone-c, ping-hdl or author.</td>
</tr>
<tr>
<td>-i mb</td>
<td>-i mnt-by</td>
<td>Maintainer name</td>
<td>Objects with a matching mnt-by.</td>
</tr>
<tr>
<td>-i ml</td>
<td>-i mnt-lower</td>
<td>Maintainer name</td>
<td>Objects with a matching mnt-lower.</td>
</tr>
<tr>
<td>-i mu</td>
<td>-i mnt/routes</td>
<td>Maintainer name</td>
<td>Objects with a matching mnt/routes.</td>
</tr>
<tr>
<td>-i mz</td>
<td>-i mnt-ref</td>
<td>Maintainer name</td>
<td>Objects with a matching mnt-ref.</td>
</tr>
<tr>
<td>-i md</td>
<td>-i mnt-domains</td>
<td>Maintainer name</td>
<td>Objects with a matching mnt-domains.</td>
</tr>
<tr>
<td>-i mr</td>
<td>-i mbrs-by-ref</td>
<td>Maintainer name</td>
<td>Objects with a matching mbrs-by-ref.</td>
</tr>
<tr>
<td>-i dt</td>
<td>-i upd-to</td>
<td>Email</td>
<td>mntner objects with a matching upd-to.</td>
</tr>
<tr>
<td>-i mn</td>
<td>-i mnt-nfy</td>
<td>Email</td>
<td>mntner objects with a matching mnt-nfy.</td>
</tr>
<tr>
<td>-i ny</td>
<td>-i notify</td>
<td>Email</td>
<td>Organisation objects with a matching notify.</td>
</tr>
<tr>
<td>-i rm</td>
<td>-i ref-nfy</td>
<td>Email</td>
<td>Objects with a matching notify.</td>
</tr>
<tr>
<td>-i mi</td>
<td>-i mnt-irt</td>
<td>IRT name</td>
<td>inetnum and inetnum objects with a matching mnt-nfy.</td>
</tr>
<tr>
<td>-am</td>
<td>-i abuse-mailbox</td>
<td>Email</td>
<td>Objects with a matching abuse-mailbox.</td>
</tr>
</tbody>
</table>

IP Address Lookups

Example: whois -h whois.ripe.net -L 193.0.1.133
Referenced contact objects may also be returned. For the -x, -M, -m, -L, -i flags below, if an IP address is supplied, address and route objects are returned. If a reverse DNS zone is supplied, domain objects are returned.

<table>
<thead>
<tr>
<th>Flag</th>
<th>Objects returned by query</th>
</tr>
</thead>
<tbody>
<tr>
<td>-x</td>
<td>All inetnum, inetnum, route, route6 or domain objects with an exactly matching prefix or range will be returned.</td>
</tr>
<tr>
<td>-M</td>
<td>All more specific inetnum, inetnum, route, route6 or domain objects, excluding exact matches.</td>
</tr>
<tr>
<td>-m</td>
<td>First level more specific inetnum, inetnum, route, route6 or domain objects, excluding exact matches.</td>
</tr>
<tr>
<td>-l</td>
<td>All less specific inetnum, inetnum, route, route6 or domain objects, including exact matches.</td>
</tr>
<tr>
<td>-i</td>
<td>First level less specific inetnum, inetnum, route, route6 or domain objects, excluding exact matches.</td>
</tr>
<tr>
<td>-d</td>
<td>When -d is used with the flags above, both address and route object types and domain objects types are returned.</td>
</tr>
<tr>
<td>-C</td>
<td>Disables the default return of IRT objects.</td>
</tr>
</tbody>
</table>