



RIPE NCC

RIPE NETWORK COORDINATION CENTRE

RIPE Database Queries

Reference card

RIPE Database Queries



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.

apps.db.ripe.net/search/query.html

The command line client is available to download at:

ripe.net/manage-ips-and-asns/db/tools

For more documentation, see:

ripe.net/manage-ips-and-asns/db/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:

ripe.net/db

This RIPE Database Queries Reference Card can also be found online at:

ripe.net/manage-ips-and-asns/db/support/documentation/queries-ref-card

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.

LOOKUP KEY	OBJECTS RETURNED BY QUERY
Address prefix or range	IPv4 – Most specific inetnum and/or route IPv6 – Most specific inet6num and/or route6
Single address	IPv4 – Most specific inetnum and/or route and inet-rtr containing the address IPv6 – Most specific inet6num and/or route6 and inet-rtr containing the address
Network name	All inetnum and inet6num objects with a “ netname: ” containing the name specified in the query
Person or role name	All person and role objects with a “ person: ” or “ role: ” attribute containing the name specified in the query
NIC handle	person or role with a matching “ nic-hdl: ”
Organisation name	All organisation objects with an “ org-name: ” containing the name specified in the query
Organisation ID	organisation with a matching primary key
Maintainer name	mntner with a matching primary key
IRT name	irt with a matching primary key
AS Number	aut-num object with a matching “ aut-num: ” and associated as-block
AS Number – AS Number	as-block whose primary key matches or fully contains the query range
Set name	as-set , filter-set , peering-set , route-set or rtr-set with a matching primary key
Domain/reverse domain	domain or inet-rtr with a matching primary key
Route/route6	Exact match or less specific route/route6 object and exact match or less specific inetnum/inetnum6 object
Email	person , role and organisation objects with a matching “ email: ”
Key-cert	key-cert with a matching primary key
Router interface address	inet-rtr with an “ ifaddr: ” containing the IPv4 or IPv6 address specified in the query

RIPE Database Queries



Inverse Queries



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

FLAG	ALT. FLAG	LOOKUP KEY	OBJECTS RETURNED BY QUERY
-i ac	-i admin-c	NIC handle	Objects with a matching "admin-c:"
-i au	-i abuse-c	NIC handle	Objects with a matching "abuse-c:"
-i tc	-i tech-c	NIC handle	Objects with a matching "tech-c:"
-i zc	-i zone-c	NIC handle	Objects with a matching "zone-c:"
-i pc	-i ping-hdl	NIC handle	Objects with matching "ping-hdl:"
-i ah	-i author	NIC handle	Objects with matching "author:"
-i pn	-i person	NIC handle	Objects with a matching "admin-c:", "tech-c:", "zone-c:", "ping-hdl:" or "author:"
-i mb	-i mnt-by	Maintainer name	Objects with a matching "mnt-by:"
-i ml	-i mnt-lower	Maintainer name	Objects with a matching "mnt-lower:"
-i mu	-i mnt-routes	Maintainer name	Objects with a matching "mnt-routes:"
-i mz	-i mnt-ref	Maintainer name	Objects with a matching "mnt-ref:"
-i md	-i mnt-domains	Maintainer name	Objects with a matching "mnt-domains:"
-i mr	-i mbrs-by-ref	Maintainer name	Set objects (as-set , route-set and rtr-set) with a matching "mbrs-by-ref:"
-i dt	-i upd-to	Email	mntner objects with a matching "upd-to:"
-i mn	-i mnt-nfy	Email	mntner objects with a matching "mnt-nfy:"
-i ny	-i notify	Email	Organisation objects with a matching "ref-nfy:"
-i rn	-i ref-nfy	Email	Objects with a matching "notify:"
-i mi	-i mnt-irt	IRT name	inetnum and inet6num objects with a matching "mnt-irt:"
am	-i abusemailbox	Email	Objects with a matching "abusemailbox:"
-i ns	-i nserver	Domain name or single address	domain objects with a matching <i>nserver host name part</i>
-i at	-i auth	PGP key	mntner objects where the "auth:" matches the specified key-cert object
-i fp	-i fingerpr	Fingerprint	key-cert objects with a matching "fingerpr:"
-i og	-i org	Organisation ID	Objects with a matching "org:"
-i iy	-i irt-nfy	Email	irt objects with a matching "irt-nfy:"
-i la	-i local-as	AS Number	inet-rtr objects with a matching "local-as:"
-i mo	-i member-of	Set name	Objects with a matching "member-of:", if their membership claim is validated by the "mbrs-by-ref:" of the set
-i or	-i origin	AS Number	route and route6 objects with a matching "origin:"

RIPE Database Queries



Database Help



Example: `whois -h whois.ripe.net -t person`

FLAG	ARGUMENT	RETURNS
-t	Object type	Template for the specified object type
-v	Object type	Verbose template for the specified object type
	"help"	List of query options available in the database
-q	"sources"	Current set of sources along with the information required for mirroring
-q	"version"	Current version of the server
-q	"types"	A list of all available object types
-V	Client tag	Sends information about the client to the server

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`, `-l` 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.

FLAG	OBJECTS RETURNED BY QUERY
-x	All inetnum , inet6num , route , route6 or domain objects with an exactly matching prefix or range will be returned
-M	All more specific inetnum , inet6num , route , route6 or domain objects, excluding exact matches
-m	First level more specific inetnum , inet6num , route , route6 or domain objects, excluding exact matches
-L	All less specific inetnum , inet6num , route , route6 or domain objects, including exact matches
-l	First level less specific inetnum , inet6num , route , route6 or domain objects, excluding exact matches
-d	When <code>-d</code> is used with with the flags above, both address and route object types and domain objects types are returned
-c	Return related IRT objects

RIPE Database Queries



Miscellaneous Flags



Example: `whois -h whois.ripe.net -q sources`

FLAG	ARGUMENT	OBJECTS RETURNED BY QUERY
-s	Source(s)	Specifies source database(s) and in which order to look up when performing a query.
-K		Only the primary keys of an object are returned. The exceptions are set objects where the member's attributes will also be returned. This flag does not apply to person , role and organisation objects.
-h	Server address	Specifies a query of another server.
-k	Optional normal query	Requests a persistent connection. A client may issue multiple queries on the same connection. The server will not close the connection until it receives a -k without an argument (after the first one).
-B		Switches off default email filtering behaviour. Shows entire object including all email addresses.
-G		Turns off logical grouping of objects in query results and lists objects according to type.
-b		Brief output mode. Only shows primary key (address range) and abuse mailboxes.
-F		Produce output using shorthand notation for attribute names.

Commonly Used Flags

INVERSE LOOKUPS

FLAG	ARGUMENT	OBJECTS RETURNED BY QUERY
-i person	NIC handle	Objects with matching "admin-c:", "tech-c:", "zone-c:" or "author:"
-i mnt-by	Maintainer name	Objects with a matching "mnt-by:"

NARROWING DOWN OR BROADENING SEARCH

FLAG	ARGUMENT	EFFECT
-r		Disables recursive search for contact information after retrieving the objects that match the lookup key
-T	Object type(s)	Restricts the type of objects to look up in the query
--resource		Specifies that the server should perform lookups in all available source database(s). See also "-q sources" query



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