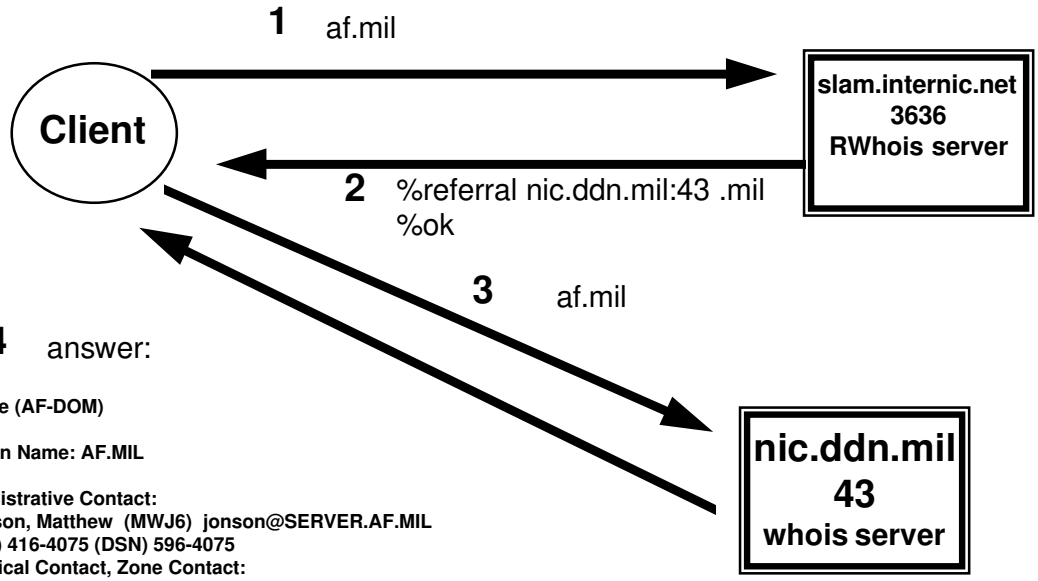
Referral Whois (RWhois)

- Compatable with whois and whois++ query
- Merger of ideas from DNS, sendmail, X.500, and whois++
- Distribution of data using ‘referral’
  - reduction of query referral
  - exact match referral
  - next level referral
- Additional relevant information using ‘see-also’

Simple referral



Air Force (AF-DOM)

Domain Name: AF.MIL

Administrative Contact:
Jonson, Matthew (MWJ6) jonson@SERVER.AF.MIL
(205) 416-4075 (DSN) 596-4075
Technical Contact, Zone Contact:
Hostetter, Ira (IH21) AFDOMAIN@SERVER.AF.MIL
(205) 416-3126 (DSN) 596-3126
%ok

Directives (Client - Server)

- **Query**
- **-RWhois<SP>-V<numeric version #>**
- **-load**
- **-limit**
- **-schema<SP>[object type]**
- **-xfer<SP>[object type]**
- **-quit**
- **-status**
- **-cache<SP><on/off>**

Directives (Client - Server)

Continued

- **-holdconnect<SP><on/off>**
- **-forward<SP><on/off>**
- **-soa<SP>[authority area]**
- **-badref<SP><server:port:query>**
- **-recurref<SP><server:port:query>**
- **-register<SP>on<SP><add/mod/del><SP>**
  <e-mail contact><SP><authority info>
- **-register<SP>off**

Responses (Server - Client)

- %RWhois<SP><server><SP>V-<numeric version #><SP><server name>
- %referral<SP><host:port><SP><reduced query>
- %see-also<SP><host:port:query>
- %load<SP><current><SP><average>
- %ok
- %error<SP><error number><SP><error text>

Responses (Server - Client)

Continued

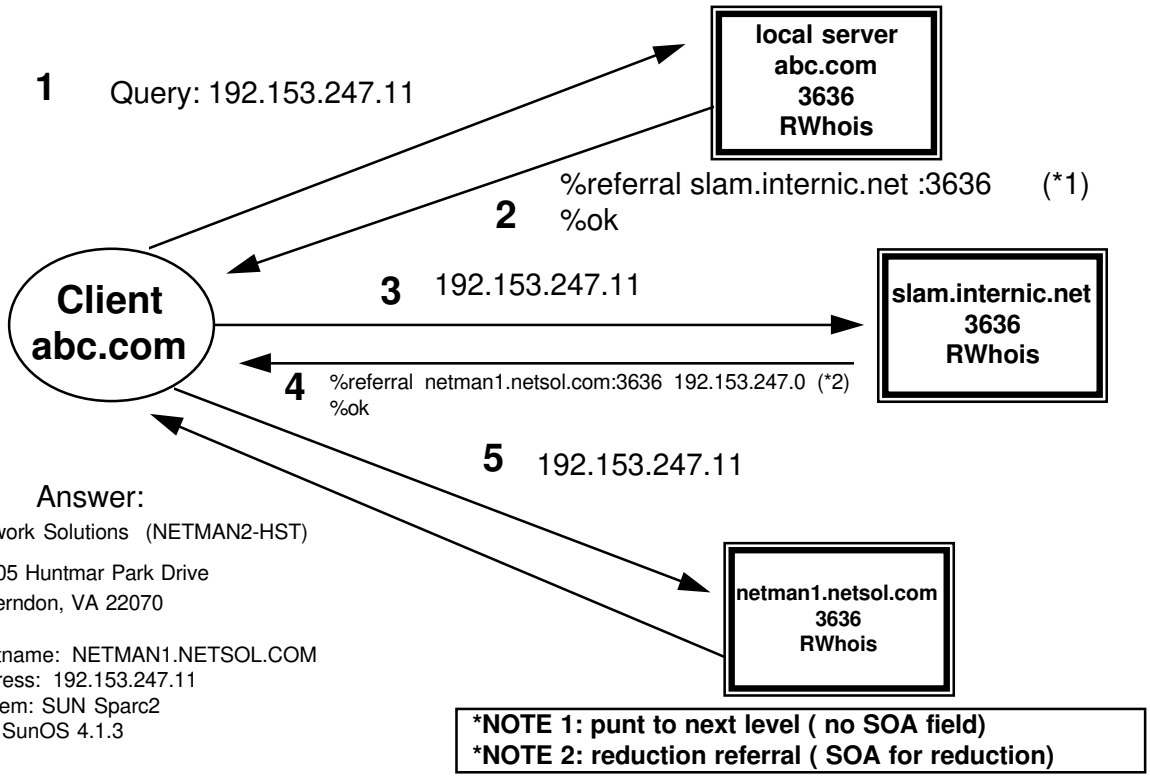
- %soa
  - %soa<SP>authority:<SP><authority area>
  - %soa<SP>ttl:<SP><seconds>
  - %soa<SP>serial:<SP><number>
  - %soa<SP>refresh:<SP><seconds>
  - %soa<SP>retry:<SP><seconds>
  - %soa<SP>tech-contact<SP><e-mail address>
  - %soa<SP>admin-contact<SP><e-mail address>
  - %soa<SP>hostmaster:<SP><e-mail address>

Responses (Server - Client)

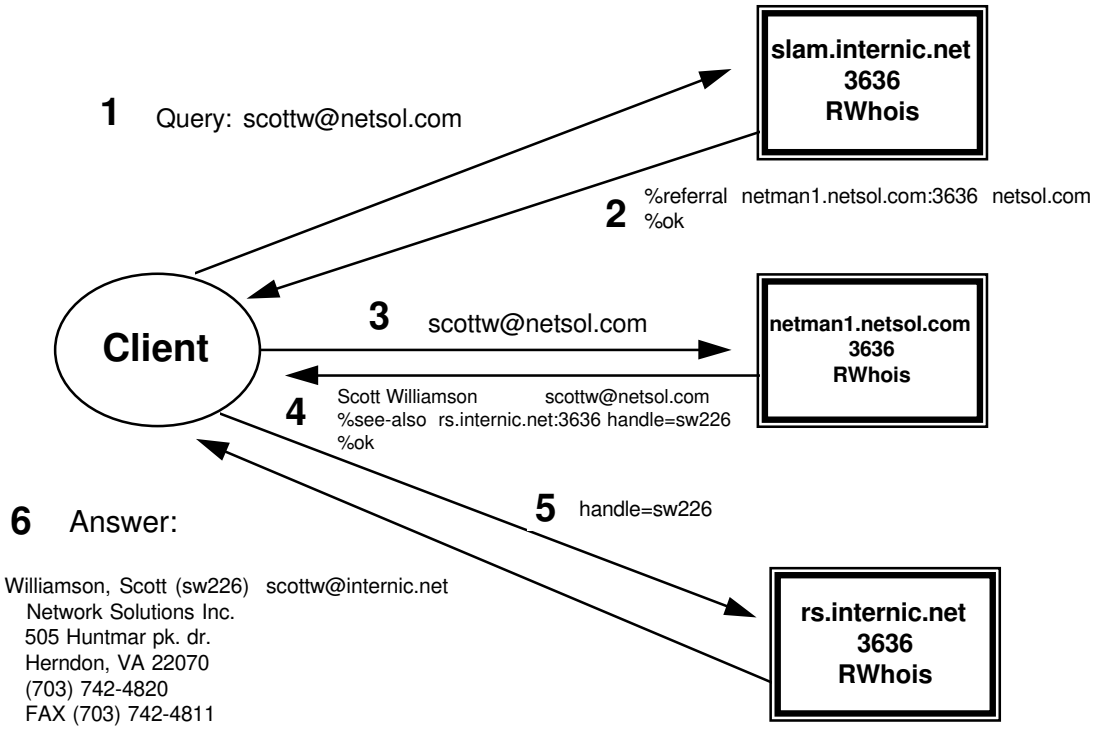
Continued

- **%status**
  - **%status<SP>limit:<SP><current limit>**
  - **%status<SP>load:<SP><current load>**
  - **%status<SP>cache:<SP><on/off>**
  - **%status<SP>holdconnect:<SP><on/off>**
  - **%status<SP>forward:<SP><on/off>**

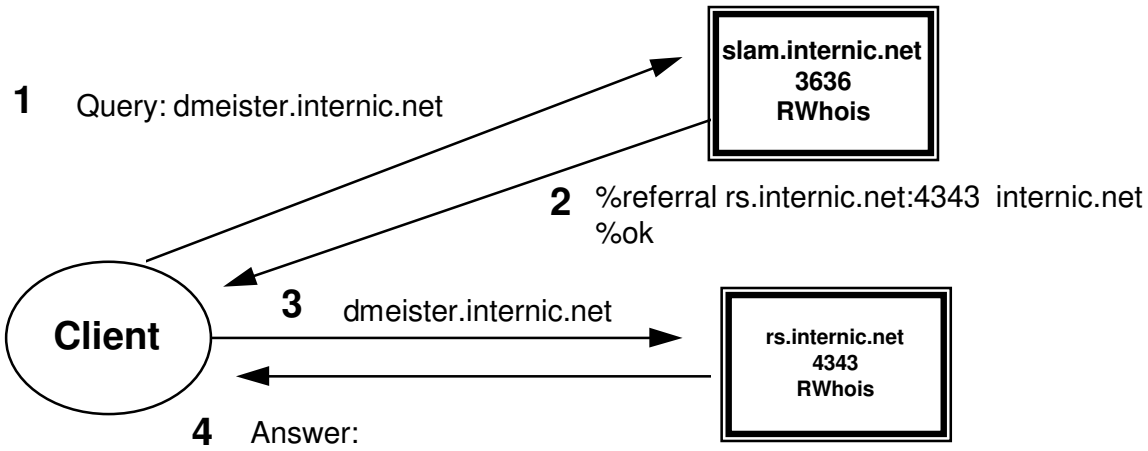
RWhois
IP Number Query



RWhois
E-Mail Address Query



RWhois
Host/Domain Name Query

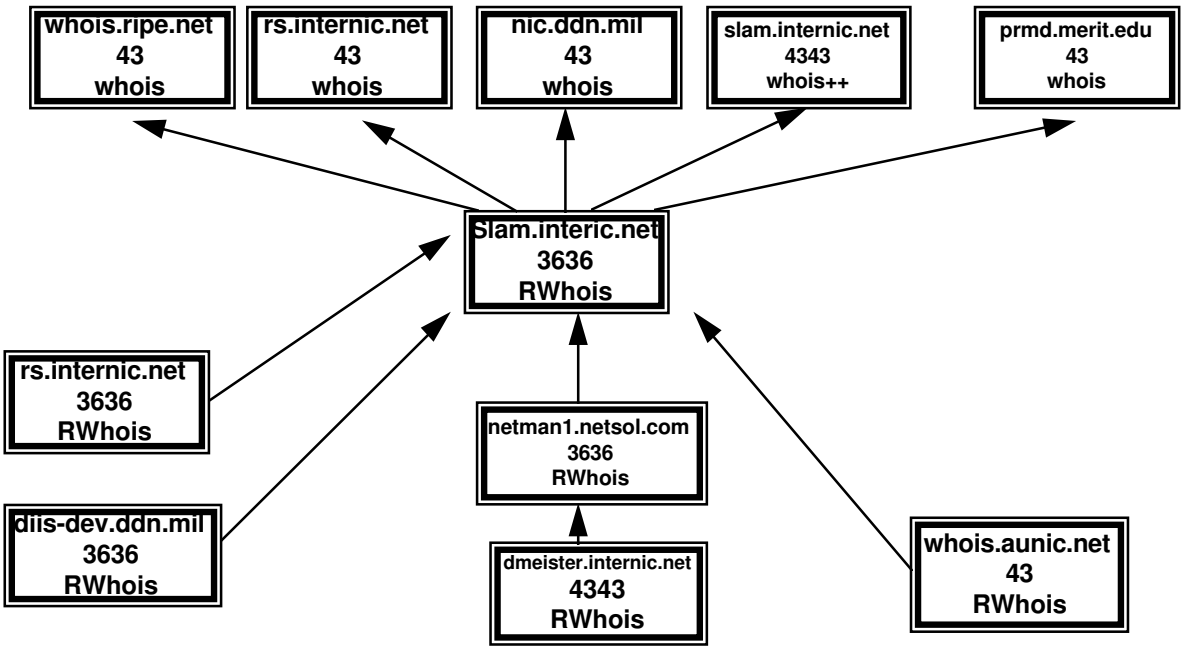


Network Solutions, Inc. (DMEISTER-HST)
505 Huntmar Park Dr.
Herndon, VA 22070

Hostname: dmeister.internic.net
Address: 198.41.0.21
System: SUN SLC
OS:
Technical Contact:
Williamson, Scott (SW226) scottw@internic.net
(703) 742-4820

Record Last Updated on: 28-Jan-94.
%ok

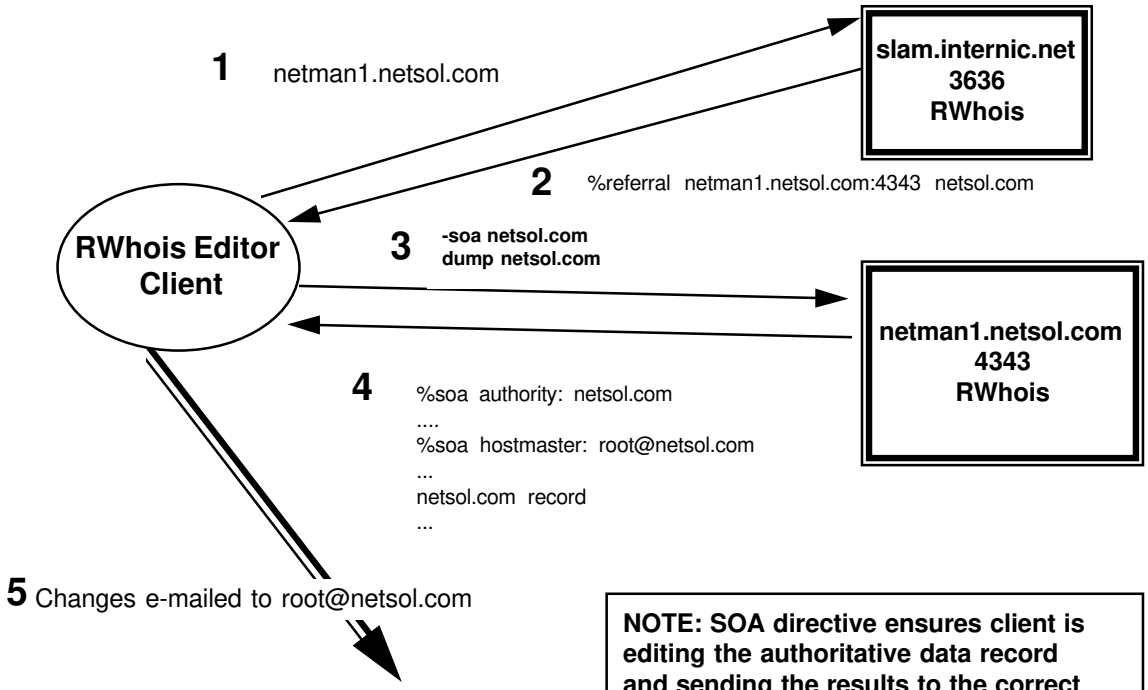
RWhois Testbed



***NOTE: whois & whois++ servers must be a leaf of the tree**

RWhois Edit

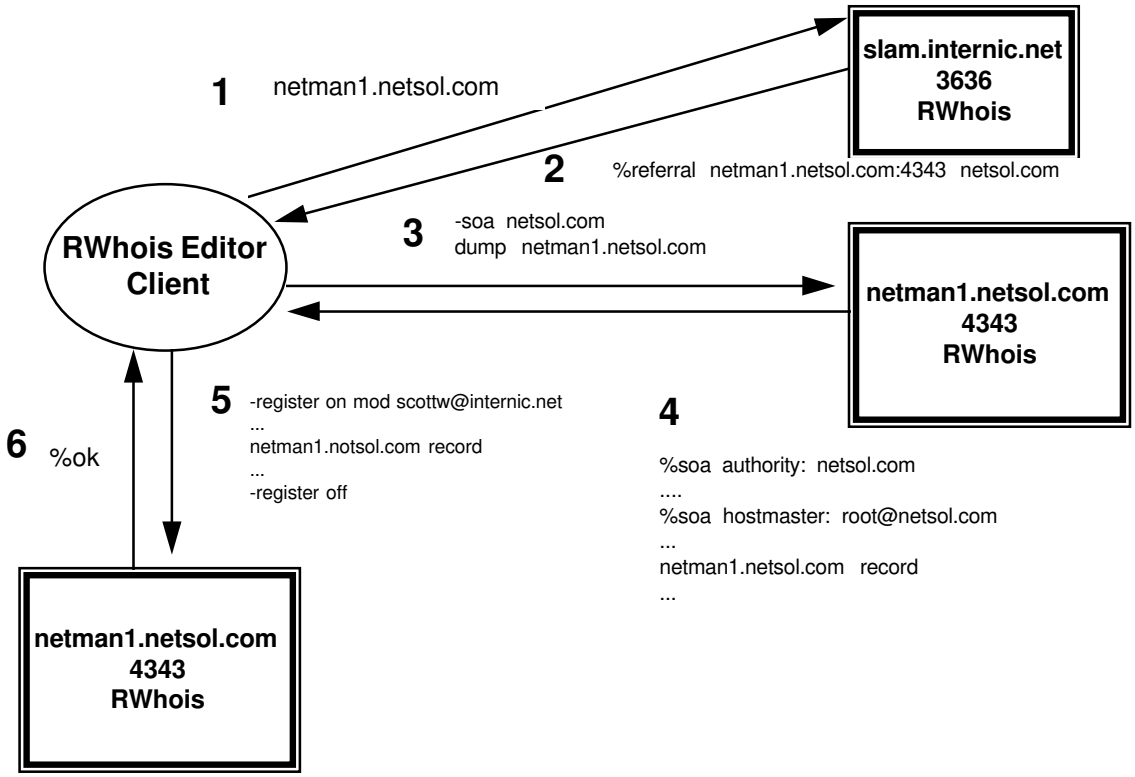
with e-mail registration



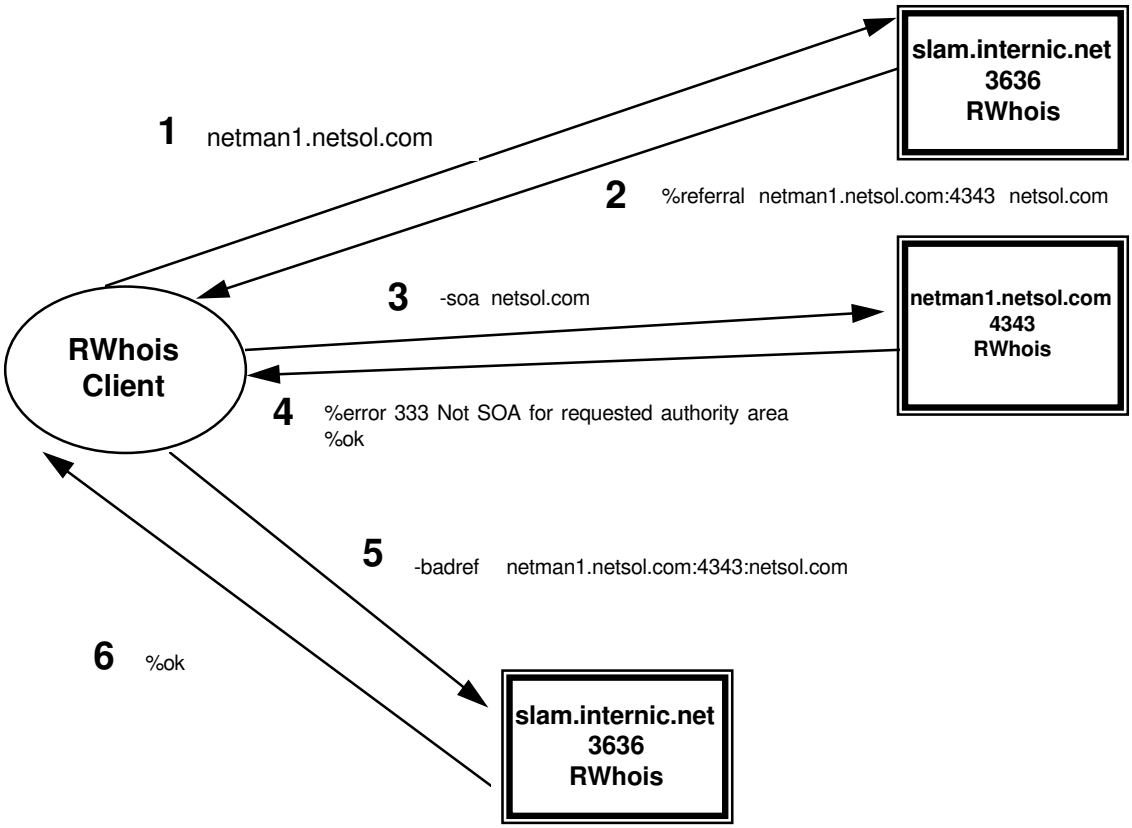
NOTE: SOA directive ensures client is editing the authoritative data record and sending the results to the correct e-mail registration account.

RWhois Edit

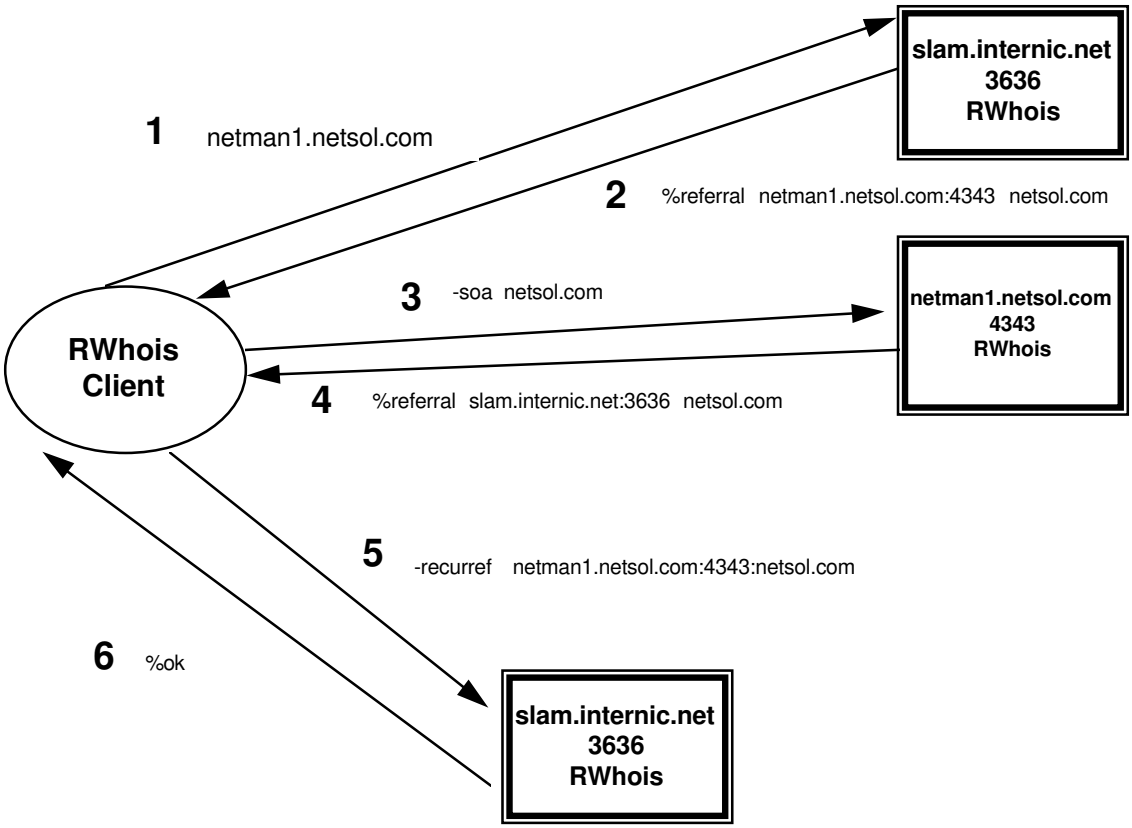
with %register directive



RWhois Bad Delegation Source Server Notification



RWhois Recursive Referral Source Server Notification



Future Issues

- **Security for %register directive**