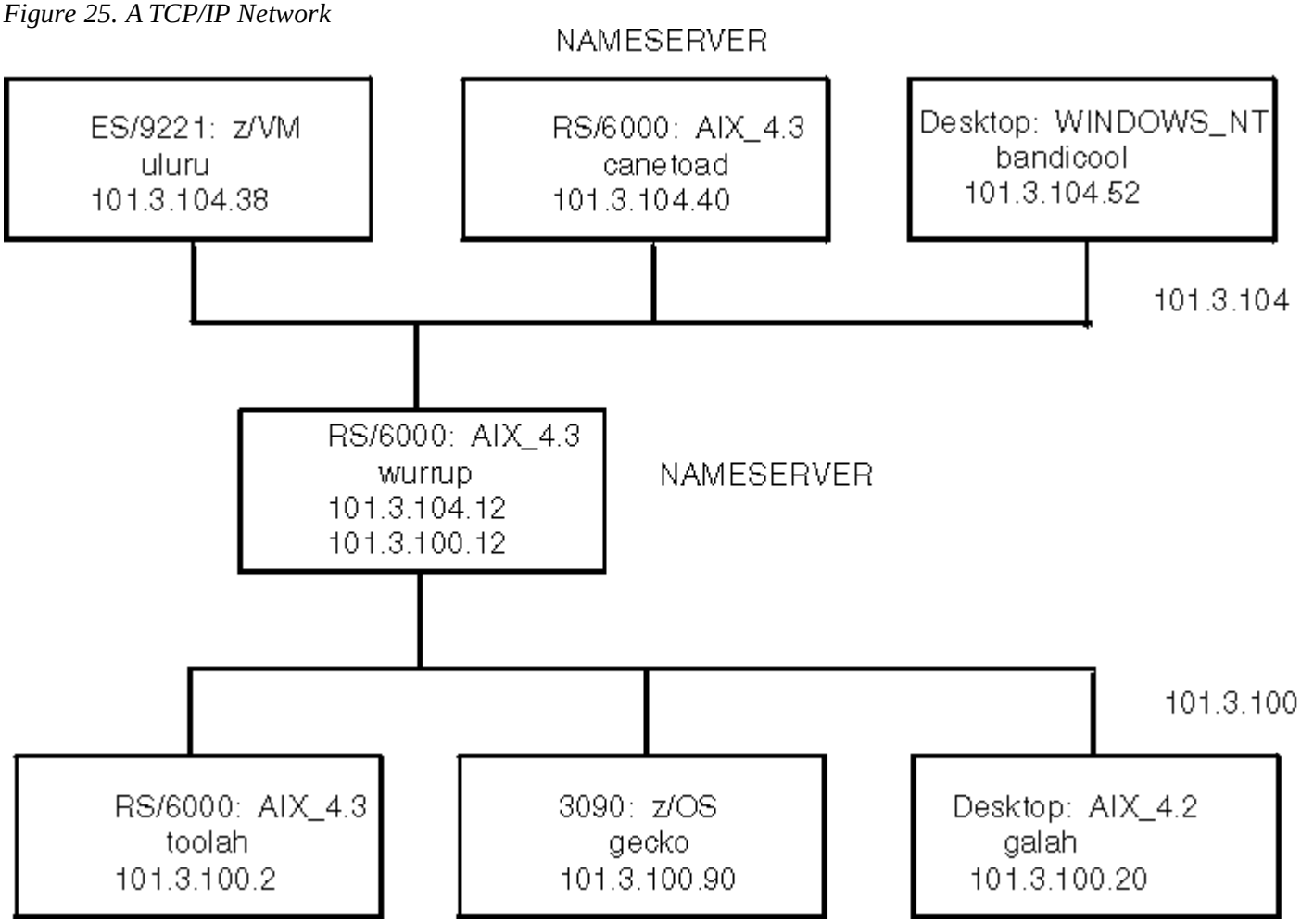
# NSLOOKUP Examples

z/VM V5R4.0 TCP/IP User's Guide
SC24-6127-04

This section contains examples of NSLOOKUP command line mode queries, and interactive session mode queries using the various options available for NSLOOKUP commands.

In Figure 25, the router, `wurrup`, has two internet addresses and there are two name servers, `wurrup` being the primary name server. This network is described by a single zone in the domain naming hierarchy stored in the name servers. The domain name is fourex.oz.

*Figure 25. A TCP/IP Network*




The following are examples of how to use NSLOOKUP to extract information from a name server. The queries are executed from the VM host `uluru` at IP address *101.3.104.38* on the network described in Figure 25.

The following examples are command line mode queries.

1. To make a simple address query:

```
   User:   nslookup toolah.fourex.oz wurrup.fourex.oz
 System:   Server:  wurrup
Address:   101.3.104.12

           Name:   toolah.fourex.oz
```

```
            Name:    toolah.fourex.oz
            Address:   101.3.100.2
```

2. To specify a name server (NS) type record lookup:

```
     User:   nslookup -query=ns fourex.oz
   System:   Server:  canetoad
  Address:   101.3.104.40

             fourex.oz  nameserver = wurrup.fourex.oz
             fourex.oz  nameserver = canetoad.fourex.oz
             wurrup.fourex.oz   internet address = 101.3.100.12
             wurrup.fourex.oz   internet address = 101.3.104.12
             canetoad.fourex.oz internet address = 101.3.104.40
```

The following command places NSLOOKUP in interactive session mode with `wurrup` as the default server.

```
   User:   nslookup - wurrup
 System:   Default Server:  wurrup
Address:   101.3.104.12
```

The following examples are all in the interactive session mode initiated in the preceding example.

1. Show the default flag settings:

```
     User:   set all
   System:   >; Default Server:  wurrup
  Address:   101.3.104.12

             Set options:
             nodebug         defname         nosearch        recurse
             nod2            novc            noignoretc      port=53
             querytype=A     class=IN        timeout=60      retry=1
             root=ns.nic.ddn.mil
             domain=FOUREX.OZ
             srchlist=FOUREX.OZ
```

2. Perform a simple address query:

```
     User:   toolah
   System:   >; Server:  wurrup
  Address:   101.3.104.12

             Name:    toolah.FOUREX.OZ
             Address:  101.3.100.2
```

3. Set the query record type to HINFO, and perform another query:

```
     User:   set q=HINFO
             toolah
   System:   >; >; Server:  wurrup
  Address:   101.3.104.12

             toolah.FOUREX.OZ   CPU = RS6000     OS = AIX3.2
```

4. Find out the name servers available for a domain:

```
     User:   set q=NS
             fourex.oz
   System:   >; >; Server:  wurrup
  Address:   101.3.104.12

             fourex.oz  nameserver = wurrup.fourex.oz
             fourex.oz  nameserver = canetoad.fourex.oz
             wurrup.fourex.oz   internet address = 101.3.100.12
             wurrup.fourex.oz   internet address = 101.3.104.12
             canetoad.fourex.oz internet address = 101.3.104.40
```

5. Change the current server from `wurrup` to `canetoad` and make more queries:

```
   User:   server canetoad
 System:   >; Default Server:  canetoad.fourex.oz
Address:   101.3.104.40

   User:   set q=A
           gecko
 System:   >; Server:  canetoad.fourex.oz
Address:   101.3.104.40

           Name:    gecko.fourex.oz
           Address:  101.3.100.90
```

6. Enable debugging and execute a simple query to see the result, and then disable debugging:

```
   User:   set deb
           wurrup
 System:   >; >; Server:  canetoad.FOUREX.OZ
Address:   101.3.104.40

           res_mkquery(0, wurrup.FOUREX.OZ, 1, 1)
           ------------
           Got answer:
              HEADER:
                 opcode = QUERY, id = 7, rcode = NOERROR
                 header flags:  response, auth. answer, want recursion,
                 recursion avail
                 questions = 1, answers = 2, authority records = 0,
                 additional = 0

              QUESTIONS:
                 wurrup.FOUREX.OZ, type = A, class = IN
              ANSWERS:
              ->; wurrup.FOUREX.OZ
                 internet address = 101.3.104.12
                 ttl = 9999999 (115 days 17 hours 46 mins 39 secs)
              ->; wurrup.FOUREX.OZ
                 internet address = 101.3.100.12
                 ttl = 9999999 (115 days 17 hours 46 mins 39 secs)

           ------------
           Name:    wurrup.FOUREX.OZ
           Addresses:  101.3.104.12, 101.3.100.12
   User:   set nodeb
```

7. Find all addresses in the `fourex.oz` domain using the `ls` option:

```
   User:   ls fourex.oz
 System:   >; canetoad.FOUREX.OZ
           fourex.oz                    server = wurrup.fourex.oz
           wurrup                        101.3.100.12
           wurrup                        101.3.104.12
           fourex.oz                    server = canetoad.fourex.oz
           canetoad                      101.3.104.40
           gecko                         101.3.100.90
           wurrup                        101.3.100.12
           wurrup                        101.3.104.12
           galah                         101.3.100.20
           bandicoot                     101.3.104.52
           toolah                        101.3.100.2
           canetoad                      101.3.104.40
           loopback                      127.0.0.1
           uluru                         101.3.104.38
```

8. Find all aliases in the `fourex.oz` domain, then exit from NSLOOKUP interactive session mode:

```
   User:   ls -a fourex.oz
 System:   >; canetoad.FOUREX.OZ
           localhost                     loopback.fourex.oz
           infoserver                    wurrup.fourex.oz
           pabxserver                    wurrup.fourex.oz
   User:   exit
```