

**UAT for DNS**  
**for**  
**DNS project for NRBGLOBAL BANK**

Submitted By



**BDCOM Online Limited**

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## UAT FOR DNS

The Domain Name System (**DNS**) is a standard technology for managing the names of Web sites and other Internet domains. DNS is an Internet service that translates domain names into IP addresses. Because domain names (example - robi.com.bd) are alphabetic, they're easier to remember. The Internet however, is really based on IP addresses. Every time you use a domain name, therefore, a DNS service must translate the name into the corresponding IP address. For example, the domain name ns1.nrbglobalbank.com might translate to 103.19.36.1.

Reverse DNS lookup (also known as rDNS) is a process to determine the hostname associated with a given IP address. Typically, the DNS is used to determine what IP address is associated with a given hostname; so to reverse resolve a known IP address is to lookup what the associated hostname for it. A reverse lookup is often referred to simply as reverse resolving, or more specifically reverse DNS lookups. The most common uses of the reverse DNS are:

1. Anti-spam
2. Network troubleshooting
3. Avoid spammers and phishers using a forward confirmed reverse DNS etc

The DNS system is, in fact, its own network. If one DNS server doesn't know how to translate a particular domain name, it asks another one, and so on, until the correct IP address is returned.

There are various ways to do the testing DNS server resolution. The total procedure given below:

Objective	<b>Forward Traffic Test:</b> host is a simple utility for performing DNS lookups. It is normally used to convert names to IP addresses and vice versa. When no arguments or options are given, host prints a short summary of its command line arguments and options.
Test Procedure	host -vt any nrbglobalbank.com ns1.nrbglobalbank.com
Sample Output	Trying "nrbglobalbank.com" Using domain server: Name: ns1.nrbglobalbank.com Address: 10.66.1.251#53 Aliases:  ;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 51047 ;; flags: qr aa rd ra; QUERY: 1, ANSWER: 8, AUTHORITY: 0, ADDITIONAL: 8  ;; QUESTION SECTION:

UAT of DNS for ROBI

	<pre> ;nrbglobalbank.com.      IN  ANY  ;; ANSWER SECTION: nrbglobalbank.com.  3600 IN  MX  10 mx2.nrbglobalbank.com. nrbglobalbank.com.  3600 IN  MX  20 mx3.nrbglobalbank.com. nrbglobalbank.com.  3600 IN  MX  20 mx4.nrbglobalbank.com. nrbglobalbank.com.  3600 IN  A   192.195.77.245 nrbglobalbank.com.  3600 IN  NS  ns1.nrbglobalbank.com. nrbglobalbank.com.  3600 IN  NS  ns2.nrbglobalbank.com. nrbglobalbank.com.  3600 IN  NS  ns.nrbglobalbank.com. nrbglobalbank.com.  3600 IN  SOA ns.nrbglobalbank.com. root.nrbglobalbank.com. 2016042601 3600 1800 1209600 3600  ;; ADDITIONAL SECTION: mx2.nrbglobalbank.com. 3600 IN  A   120.50.11.38 mx3.nrbglobalbank.com. 3600 IN  A   120.50.11.33 mx4.nrbglobalbank.com. 3600 IN  A   120.50.11.34 ns.nrbglobalbank.com.  3600 IN  A   10.66.1.254 ns1.nrbglobalbank.com. 3600 IN  A   10.66.1.251 ns1.nrbglobalbank.com. 3600 IN  A   103.19.36.1 ns2.nrbglobalbank.com. 3600 IN  A   103.19.36.254 ns2.nrbglobalbank.com. 3600 IN  A   10.66.1.252  Received 333 bytes from 10.66.1.251#53 in 0 ms </pre>
Applicable Server	103.19.36.1,103.19.36.254
Original Output	<pre> root@ns1:~# host -vt any nrbglobalbank.com ns1.nrbglobalbank.com Trying "nrbglobalbank.com" Using domain server: Name: ns1.nrbglobalbank.com Address: 10.66.1.251#53 Aliases:  ;; -&gt;&gt;HEADER&lt;&lt;- opcode: QUERY, status: NOERROR, id: 12978 ;; flags: qr aa rd ra; QUERY: 1, ANSWER: 8, AUTHORITY: 0, ADDITIONAL: 8  ;; QUESTION SECTION: ;nrbglobalbank.com.      IN  ANY  ;; ANSWER SECTION: nrbglobalbank.com.  3600 IN  MX  20 mx4.nrbglobalbank.com. nrbglobalbank.com.  3600 IN  MX  10 mx2.nrbglobalbank.com. nrbglobalbank.com.  3600 IN  MX  20 mx3.nrbglobalbank.com. nrbglobalbank.com.  3600 IN  A   192.195.77.245 nrbglobalbank.com.  3600 IN  NS  ns2.nrbglobalbank.com. nrbglobalbank.com.  3600 IN  NS  ns1.nrbglobalbank.com. nrbglobalbank.com.  3600 IN  NS  ns.nrbglobalbank.com. </pre>

UAT of DNS for ROBI

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nrbglobalbank.com. 3600 IN SOA ns.nrbglobalbank.com.
root.nrbglobalbank.com. 2016042601 3600 1800 1209600 3600

;; ADDITIONAL SECTION:
mx2.nrbglobalbank.com. 3600 IN A 120.50.11.38
mx3.nrbglobalbank.com. 3600 IN A 120.50.11.33
mx4.nrbglobalbank.com. 3600 IN A 120.50.11.34
ns.nrbglobalbank.com. 3600 IN A 10.66.1.254
ns1.nrbglobalbank.com. 3600 IN A 10.66.1.251
ns1.nrbglobalbank.com. 3600 IN A 103.19.36.1
ns2.nrbglobalbank.com. 3600 IN A 103.19.36.254
ns2.nrbglobalbank.com. 3600 IN A 10.66.1.252

Received 333 bytes from 10.66.1.251#53 in 1 ms
root@ns2:~# host -vt any nrbglobalbank.com ns1.nrbglobalbank.com
Trying "nrbglobalbank.com"
Using domain server:
Name: ns1.nrbglobalbank.com
Address: 10.66.1.251#53
Aliases:

;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 29133
;; flags: qr aa rd ra; QUERY: 1, ANSWER: 8, AUTHORITY: 0, ADDITIONAL: 8

;; QUESTION SECTION:
;nrbglobalbank.com. IN ANY

;; ANSWER SECTION:
nrbglobalbank.com. 3600 IN MX 10 mx2.nrbglobalbank.com.
nrbglobalbank.com. 3600 IN MX 20 mx3.nrbglobalbank.com.
nrbglobalbank.com. 3600 IN MX 20 mx4.nrbglobalbank.com.
nrbglobalbank.com. 3600 IN A 192.195.77.245
nrbglobalbank.com. 3600 IN NS ns.nrbglobalbank.com.
nrbglobalbank.com. 3600 IN NS ns2.nrbglobalbank.com.
nrbglobalbank.com. 3600 IN NS ns1.nrbglobalbank.com.
nrbglobalbank.com. 3600 IN SOA ns.nrbglobalbank.com.
root.nrbglobalbank.com. 2016042601 3600 1800 1209600 3600

;; ADDITIONAL SECTION:
mx2.nrbglobalbank.com. 3600 IN A 120.50.11.38
mx3.nrbglobalbank.com. 3600 IN A 120.50.11.33
mx4.nrbglobalbank.com. 3600 IN A 120.50.11.34
ns.nrbglobalbank.com. 3600 IN A 10.66.1.254
ns1.nrbglobalbank.com. 3600 IN A 103.19.36.1
ns1.nrbglobalbank.com. 3600 IN A 10.66.1.251
ns2.nrbglobalbank.com. 3600 IN A 10.66.1.252
ns2.nrbglobalbank.com. 3600 IN A 103.19.36.254

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UAT of DNS for ROBI

	Received 333 bytes from 10.66.1.251#53 in 1 ms
Result	Ok
Remarks	Pass
Signature BDCOM	
Signature NRBGLOBALBANK	

Objective	<b>Forward Traffic Test</b> :To perform a reverse lookup
Test Procedure	<b>host -vt ptr 103.19.36.1 ns1.nrbglobalbank.com</b>
Sample Output	<pre> root@ns1:~# host -vt ptr 103.19.36.1 ns1.nrbglobalbank.com Trying "1.36.19.103.in-addr.arpa" Using domain server: Name: ns1.nrbglobalbank.com Address: 10.66.1.251#53 Aliases:  ;; -&gt;&gt;HEADER&lt;&lt;- opcode: QUERY, status: NOERROR, id: 32861 ;; flags: qr aa rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 3, ADDITIONAL: 5  ;; QUESTION SECTION: ;1.36.19.103.in-addr.arpa.  IN  PTR  ;; ANSWER SECTION: 1.36.19.103.in-addr.arpa. 3600 IN  PTR  ns1.nrbglobalbank.com.  ;; AUTHORITY SECTION: 36.19.103.in-addr.arpa. 3600 IN  NS   ns2.nrbglobalbank.com. 36.19.103.in-addr.arpa. 3600 IN  NS   ns1.nrbglobalbank.com. 36.19.103.in-addr.arpa. 3600 IN  NS   ns.nrbglobalbank.com.  ;; ADDITIONAL SECTION: ns.nrbglobalbank.com. 3600 IN  A    10.66.1.254 ns1.nrbglobalbank.com. 3600 IN  A    10.66.1.251 ns1.nrbglobalbank.com. 3600 IN  A    103.19.36.1 ns2.nrbglobalbank.com. 3600 IN  A    103.19.36.254 ns2.nrbglobalbank.com. 3600 IN  A    10.66.1.252 </pre>

UAT of DNS for ROBI

	Received 206 bytes from 10.66.1.251#53 in 0 ms
Applicable Server	103.19.36.1, 103.19.36.254
Original Output	<pre> root@ns1:~# host -vt ptr 103.19.36.1 ns1.nrbglobalbank.com Trying "1.36.19.103.in-addr.arpa" Using domain server: Name: ns1.nrbglobalbank.com Address: 10.66.1.251#53 Aliases:  ;; -&gt;&gt;HEADER&lt;&lt;- opcode: QUERY, status: NOERROR, id: 32861 ;; flags: qr aa rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 3, ADDITIONAL: 5  ;; QUESTION SECTION: ;1.36.19.103.in-addr.arpa.  IN  PTR  ;; ANSWER SECTION: 1.36.19.103.in-addr.arpa. 3600 IN  PTR  ns1.nrbglobalbank.com.  ;; AUTHORITY SECTION: 36.19.103.in-addr.arpa. 3600 IN  NS   ns2.nrbglobalbank.com. 36.19.103.in-addr.arpa. 3600 IN  NS   ns1.nrbglobalbank.com. 36.19.103.in-addr.arpa. 3600 IN  NS   ns.nrbglobalbank.com.  ;; ADDITIONAL SECTION: ns.nrbglobalbank.com. 3600 IN  A    10.66.1.254 ns1.nrbglobalbank.com. 3600 IN  A    10.66.1.251 ns1.nrbglobalbank.com. 3600 IN  A    103.19.36.1 ns2.nrbglobalbank.com. 3600 IN  A    103.19.36.254 ns2.nrbglobalbank.com. 3600 IN  A    10.66.1.252  Received 206 bytes from 10.66.1.251#53 in 0 ms root@ns2:~# host -vt ptr 103.19.36.254 ns2.nrbglobalbank.com Trying "254.36.19.103.in-addr.arpa" Using domain server: Name: ns2.nrbglobalbank.com Address: 103.19.36.254#53 Aliases:  ;; -&gt;&gt;HEADER&lt;&lt;- opcode: QUERY, status: NOERROR, id: 44441 ;; flags: qr aa rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 3, ADDITIONAL: 5  ;; QUESTION SECTION: ;254.36.19.103.in-addr.arpa.  IN  PTR  ;; ANSWER SECTION: 254.36.19.103.in-addr.arpa. 3600 IN  PTR  ns2.nrbglobalbank.com. </pre>

UAT of DNS for ROBI

	<pre>;; AUTHORITY SECTION: 36.19.103.in-addr.arpa. 3600 IN NS ns2.nrbglobalbank.com. 36.19.103.in-addr.arpa. 3600 IN NS ns.nrbglobalbank.com. 36.19.103.in-addr.arpa. 3600 IN NS ns1.nrbglobalbank.com.  ;; ADDITIONAL SECTION: ns.nrbglobalbank.com. 3600 IN A 10.66.1.254 ns1.nrbglobalbank.com. 3600 IN A 10.66.1.251 ns1.nrbglobalbank.com. 3600 IN A 103.19.36.1 ns2.nrbglobalbank.com. 3600 IN A 103.19.36.254 ns2.nrbglobalbank.com. 3600 IN A 10.66.1.252  Received 208 bytes from 103.19.36.254#53 in 4 ms</pre>
Result	ok
Remarks	Pass
Signature BDCOM	
Signature NRBGLOBALBANK	

Objective	<b>Forward Traffic Test</b> :Nslookup is a program to query Internet domain name servers. Nslookup has two modes: interactive and non-interactive. Interactive mode allows the user to query name servers for information about various hosts and domains or to print a list of hosts in a domain. Non-interactive mode is used to print just the name and requested information for a host or domain
Test Procedure	<pre>root@ns1:~# nslookup &gt; server ns1.nrbglobalbank.com Default server: ns1.nrbglobalbank.com Address: 10.66.1.251#53 Default server: ns1.nrbglobalbank.com Address: 103.19.36.1#53</pre>
Sample Output	
Applicable Server	
Original Output	
Result	
Remarks	
Signature BDCOM	
Signature ROBI	

Objective	<b>Forward Traffic Test</b> :To perform a reverse lookup
Test Procedure	<pre>nslookup &gt; server 202.134.13.4</pre>

UAT of DNS for ROBI

	<b>Default server: 202.134.13.4</b> <b>Address: 202.134.13.4#53</b> > set type=any > 202.134.12.13
Sample Output	Server: 202.134.13.4 Address: 202.134.13.4#53  13.12.134.202.in-addr.arpa name = ns2.aktel.com. 13.12.134.202.in-addr.arpa name = ns2.aktelbd.com.
Applicable Server	10.101.11.23, 10.101.11.24, 10.16.49.58
Original Output	<b>root@dns1:/# nslookup</b> > server 10.101.11.23 <b>Default server: 10.101.11.23</b> <b>Address: 10.101.11.23#53</b> > set type=any > 202.134.12.13 Server: 10.101.11.23 Address: 10.101.11.23#53  13.12.134.202.in-addr.arpa name = ns2.aktelbd.com. 13.12.134.202.in-addr.arpa name = ns2.aktel.com.
Result	Pass
Remarks	
Signature BDCOM	
Signature ROBI	

Objective	<b>Forward Traffic Test</b> :dig ( <i>domain information groper</i> ) is a flexible tool for interrogating DNS name servers. It performs DNS lookups and displays the answers that are returned from the name server(s) that were queried. Most DNS administrators use dig to troubleshoot DNS problems because of its flexibility, ease of use and clarity of output. Other lookup tools tend to have less functionality than dig.
Test Procedure	<b>dig robi.com.bd</b>
Sample Output	<pre>;&lt;&lt;&gt;&gt;DiG 9.7.3 &lt;&lt;&gt;&gt; robi.com.bd ;; global options: +cmd ;; Got answer: ;; -&gt;&gt;HEADER&lt;&lt;- opcode: QUERY, status: NOERROR, id: 53635 ;; flags: qrrdra; QUERY: 1, ANSWER: 1, AUTHORITY: 3, ADDITIONAL: 3  ;; QUESTION SECTION: ;robi.com.bd.          IN      A</pre>



UAT of DNS for ROBI

	<pre>;; ANSWER SECTION: robi.com.bd.      83897 IN  A   202.134.12.106  ;; AUTHORITY SECTION: robi.com.bd.      76885 IN  NS  ns1.aktel.com. robi.com.bd.      76885 IN  NS  ns2.aktel.com. robi.com.bd.      76885 IN  NS  ns4.robibazar.com.  ;; ADDITIONAL SECTION: ns1.aktel.com.    4885  IN  A   202.134.13.4 ns2.aktel.com.    76885 IN  A   202.134.12.13 ns4.robibazar.com. 77012 IN  A   202.134.12.97  ;; Query time: 0 msec ;; SERVER: 210.4.77.180#53(210.4.77.180) ;; WHEN: Sun Aug 3 13:12:11 2014 ;; MSG SIZE rcvd: 166</pre>
Applicable Server	10.101.11.23, 10.101.11.24, 10.16.49.58
Original Output	<pre>root@dns3:~# dig yahoo.com  ;&lt;&lt;&gt;&gt;DiG 9.8.4-rpz2+rl005.12-P1 &lt;&lt;&gt;&gt; yahoo.com ;; global options: +cmd ;; Got answer: ;; -&gt;&gt;HEADER&lt;&lt;- opcode: QUERY, status: NOERROR, id: 9822 ;; flags: qr rdra; QUERY: 1, ANSWER: 3, AUTHORITY: 6, ADDITIONAL: 7  ;; QUESTION SECTION: ;yahoo.com.          IN      A  ;; ANSWER SECTION: yahoo.com.           1800   IN     A      98.139.183.24 yahoo.com.           1800   IN     A      206.190.36.45 yahoo.com.           1800   IN     A      98.138.253.109  ;; AUTHORITY SECTION: yahoo.com.           170788 IN     NS     ns2.yahoo.com. yahoo.com.           170788 IN     NS     ns6.yahoo.com. yahoo.com.           170788 IN     NS     ns4.yahoo.com. yahoo.com.           170788 IN     NS     ns5.yahoo.com. yahoo.com.           170788 IN     NS     ns3.yahoo.com. yahoo.com.           170788 IN     NS     ns1.yahoo.com.  ;; ADDITIONAL SECTION: ns1.yahoo.com.       170788 IN     A      68.180.131.16 ns2.yahoo.com.       170788 IN     A      68.142.255.16</pre>

UAT of DNS for ROBI

	<pre>ns3.yahoo.com.      170788 IN   A   203.84.221.53 ns4.yahoo.com.      170788 IN   A   98.138.11.157 ns5.yahoo.com.      170788 IN   A   119.160.247.124 ns6.yahoo.com.      170788 IN   A   121.101.144.139 ns6.yahoo.com.      1800  IN   AAAA 2406:2000:108:4::1006  ;; Query time: 155 msec ;; SERVER: 10.101.11.23#53(10.101.11.23) ;; WHEN: Mon Sep 1 16:36:37 2014 ;; MSG SIZE rcvd: 307</pre>
Result	Pass
Remarks	
Signature BDCOM	
Signature ROBI	

Objective	<b>Forward Traffic Test :Dns trace report</b>
Test Procedure	<b>dig +trace robi.com.bd</b>
Sample Output	<pre>; &lt;&lt;&gt;&gt;DiG 9.7.3 &lt;&lt;&gt;&gt; +trace robi.com.bd ;; global options: +cmd .           508806 IN   NS   l.root-servers.net. .           508806 IN   NS   m.root-servers.net. .           508806 IN   NS   i.root-servers.net. .           508806 IN   NS   g.root-servers.net. .           508806 IN   NS   c.root-servers.net. .           508806 IN   NS   j.root-servers.net. .           508806 IN   NS   d.root-servers.net. .           508806 IN   NS   f.root-servers.net. .           508806 IN   NS   h.root-servers.net. .           508806 IN   NS   b.root-servers.net. .           508806 IN   NS   e.root-servers.net. .           508806 IN   NS   k.root-servers.net. .           508806 IN   NS   a.root-servers.net. ;; Received 496 bytes from 210.4.77.180#53(210.4.77.180) in 0 ms  bd.         172800 IN   NS   surma.btcl.net.bd. bd.         172800 IN   NS   jamuna.btcl.net.bd. bd.         172800 IN   NS   dns.bd. ;; Received 145 bytes from 2001:7fe::53#53(i.root-servers.net) in 217 ms  robi.com.bd. 86400 IN   NS   ns2.aktel.com. robi.com.bd. 86400 IN   NS   ns1.aktel.com. ;; Received 106 bytes from 203.112.194.231#53(jamuna.btcl.net.bd) in 1 ms  robi.com.bd. 86400 IN   NS   ns1.aktel.com.</pre>

## UAT of DNS for ROBI

	<pre> robi.com.bd.      86400 IN  NS  ns2.aktel.com. robi.com.bd.      86400 IN  NS  ns4.robibazar.com. ;; Received 166 bytes from 202.134.13.4#53(ns1.aktel.com) in 207 ms </pre>
Applicable Server	10.101.11.23, 10.101.11.24, 10.16.49.58
Original Output	<pre> root@dns2:~# dig +trace robi.com.bd  ;&lt;&lt;&gt;&gt;DiG 9.8.4-rpz2+rI005.12-P1 &lt;&lt;&gt;&gt; +trace robi.com.bd ;; global options: +cmd .           510062 IN    NS   h.root-servers.net. .           510062 IN    NS   l.root-servers.net. .           510062 IN    NS   f.root-servers.net. .           510062 IN    NS   k.root-servers.net. .           510062 IN    NS   d.root-servers.net. .           510062 IN    NS   i.root-servers.net. .           510062 IN    NS   j.root-servers.net. .           510062 IN    NS   c.root-servers.net. .           510062 IN    NS   m.root-servers.net. .           510062 IN    NS   a.root-servers.net. .           510062 IN    NS   e.root-servers.net. .           510062 IN    NS   g.root-servers.net. .           510062 IN    NS   b.root-servers.net. ;; Received 496 bytes from 10.101.11.24#53(10.101.11.24) in 5 ms  bd.         172800 IN    NS   surma.btcl.net.bd. bd.         172800 IN    NS   jamuna.btcl.net.bd. bd.         172800 IN    NS   dns.bd. ;; Received 145 bytes from 192.228.79.201#53(192.228.79.201) in 1735 ms  robi.com.bd.      86400 IN  NS  ns1.aktel.com. robi.com.bd.      86400 IN  NS  ns2.aktel.com. ;; Received 90 bytes from 203.112.194.232#53(203.112.194.232) in 181 ms  robi.com.bd.      86400 IN  A   202.134.12.106 robi.com.bd.      86400 IN  NS  ns1.aktel.com. robi.com.bd.      86400 IN  NS  ns2.aktel.com. robi.com.bd.      86400 IN  NS  ns4.robibazar.com. ;; Received 166 bytes from 202.134.12.13#53(202.134.12.13) in 2 ms </pre>
Result	Pass
Remarks	
Signature BDCOM	
Signature ROBI	

Objective	<b>Forward Traffic Test</b> :Using DNS entry in local machine for name resolution
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UAT of DNS for ROBI

Test Procedure	<b>Ping google.com / Browsing</b>
Sample Output	Ping reply and successfully browsing
Applicable Server	10.101.11.23, 10.101.11.24, 10.16.49.58
Original Output	root@ntp1:~# ping www.google.com PING www.google.com (173.194.127.52) 56(84) bytes of data.
Result	Pass
Remarks	
Signature BDCOM	
Signature ROBI	

Objective	<b>Forward Traffic Test</b> :Using DNS entry in local machine for name resolution
Test Procedure	<b>nslookup</b> > <b>server ns1.robi.com.bd</b> <b>Default server: ns1.robi.com.bd</b> <b>Address: 202.134.13.4#53</b> > <b>set type=any</b> > <b>robi.com.bd</b>
Sample Output	Server: ns1.robi.com.bd Address: 202.134.13.4#53  robi.com.bd origin = ns1.aktel.com mail addr = hostmaster.robi.com.bd serial = 2014270701 refresh = 10800 retry = 3600 expire = 604800 minimum = 10800 robi.com.bd text = "v=spf1 mx ip4:202.134.12.68 ip4:202.134.12.69 mx:mail.robi.com.bd mx:mail.messaging.microsoft.com ~all mx:include:spf.protection.outlook.com ~all" robi.com.bd mail exchanger = 0 robi-com-bd.mail.protection.outlook.com. robi.com.bd mail exchanger = 10 mail.robi.com.bd. robi.com.bd mail exchanger = 20 ms14373886.msv1.invalid.outlook.com. Name: robi.com.bd Address: 202.134.12.106 robi.com.bnameserver = ns4.robibazar.com. robi.com.bnameserver = ns1.aktel.com. robi.com.bnameserver = ns2.aktel.com.
Applicable Server	10.101.11.23, 10.101.11.24, 10.16.49.58
Original Output	root@ntp1:~# nslookup

UAT of DNS for ROBI

	<pre> &gt; server dns1.robi.com.bd Default server: dns1.robi.com.bd Address: 202.134.12.10#53 &gt; set type=any &gt; google.com Server:  dns1.robi.com.bd Address:  202.134.12.10#53  Non-authoritative answer: google.com   origin = ns1.google.com   mail addr = dns-admin.google.com   serial = 2014021800   refresh = 7200   retry = 1800   expire = 1209600   minimum = 300 google.com  rdata_257 = \# 19 0005697373756573796D616E7465632E636F6D google.comnameserver = ns1.google.com. google.comnameserver = ns3.google.com. google.comnameserver = ns2.google.com. google.comnameserver = ns4.google.com.  Authoritative answers can be found from: google.comnameserver = ns3.google.com. google.comnameserver = ns2.google.com. google.comnameserver = ns1.google.com. google.comnameserver = ns4.google.com. ns1.google.com internet address = 216.239.32.10 ns2.google.com internet address = 216.239.34.10 ns3.google.com internet address = 216.239.36.10 ns4.google.com internet address = 216.239.38.10 </pre>
Result	Pass
Remarks	
Signature BDCOM	
Signature ROBI	

Objective	<b>Forward Traffic Test</b> :Count only dns query message
Test Procedure	<b>dnstest -Q</b>
Sample Output	<pre> Queries: 912 new, 20738 total Mon Aug 4 11:47:49 2014  Sources          Count    % cum% ----- 210.4.77.180    4418   21.3  21.3 </pre>

UAT of DNS for ROBI

	<pre> 119.40.80.70      3477 16.8 38.1 2403:4000:0:2::3  2766 13.3 51.4 210.4.73.118     2131 10.3 61.7 103.16.74.132    1140  5.5 67.2 103.16.72.2      1023  4.9 72.1 114.31.0.72      537   2.6 74.7 113.11.126.58    479   2.3 77.0 103.16.72.7      272   1.3 78.3 210.4.72.234     227   1.1 79.4 210.4.74.34      189   0.9 80.3 119.40.86.86     155   0.7 81.1 119.40.80.162    134   0.6 81.7 114.31.3.196     103   0.5 82.2 192.168.26.198   99    0.5 82.7 210.4.66.230     66    0.3 83.0 113.11.6.126     52    0.3 83.3 210.4.67.214     52    0.3 83.5 113.11.102.181   51    0.2 83.8 210.4.67.147     51    0.2 84.0 </pre>
Applicable Server	10.101.11.23, 10.101.11.24, 10.16.49.58
Original Output	<pre> Queries: 0 new, 4 total                               Mon Sep 1 16:03:03 2014  Sources      Count  % cum% ----- 10.101.11.25  3  75.0 75.0 10.101.11.23  1  25.0 100.0  Queries: 0 new, 4 total                               Mon Sep 1 16:03:26 2014  Query Name   Count  % cum% ----- yahoo.com    1  25.0 25.0 google.com   1  25.0 50.0 prothom-alo.com 1  25.0 75.0 aktel.com    1  25.0 100.0 </pre>
Result	Pass
Remarks	
Signature BDCOM	
Signature ROBI	

Objective	IPV6 Compatibility Test :
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## UAT of DNS for ROBI

Test Procedure	vim /var/lib/named/etc/bind/named.conf.options
Sample Output	<pre>//acl "loopback_v6" {  //    listen-on-v6 { 2403:4000:0:2::3; ::1; };  //    "robi_v6"; //    "loopback_v6";    }; max-cache-size 30M; query-source address * port 53; query-source-v6 address * port 53;</pre>
Applicable Server	10.101.11.23, 10.101.11.24, 10.16.49.58
Original Output	<pre>root@dns1:~# vim /var/lib/named/etc/bind/named.conf.options }; //acl "loopback_v6" { // ::1; //};  options {     directory "/var/cache/bind";      // If there is a firewall between you and nameservers you want     // to talk to, you may need to fix the firewall to allow multiple     // ports to talk. See http://www.kb.cert.org/vuls/id/800113      // If your ISP provided one or more IP addresses for stable     // nameservers, you probably want to use them as forwarders.     // Uncomment the following block, and insert the addresses replacing     // the all-0's placeholder.      // forwarders {     //    0.0.0.0;     // };      allow-transfer { 10.101.11.23; 10.101.11.24; 10.16.49.58; 192.168.80.30; 192.168.90.4; 202.134.12.13; 202.134.13.4; }; datasize 100M;     dump-file "named_dump.db";     interface-interval 0;     listen-on { 10.101.11.24; 202.134.12.58; 127.0.0.1; }; //    listen-on-v6 { 2403:4000:0:2::3; ::1; };     allow-recursion {         "robi_private";         "robi_public"; //    "robi_v6";</pre>

UAT of DNS for ROBI

	<pre>// "other_ROBI"; "loopback"; // "loopback_v6"; }; max-cache-size 30M; query-source address * port 53; query-source-v6 address * port 53; statistics-file "named.stats"; version "This is not the port you're looking for."; zone-statistics yes; recursive-clients 5000; };</pre>
Result	Passed
Remarks	
Signature BDCOM	
Signature ROBI	
Objective	TSIG key checking in dns named configuration file
Test Procedure	<b>cat /etc/bind/named.conf</b>
Sample Output	include "/etc/bind/robi_tsig.key";
Applicable Server	10.101.11.23, 10.101.11.24, 10.16.49.58
Original Output	<pre>root@dns1:~# cat /etc/bind/named.conf statistics-channels { inet 127.0.0.1 port 8053 allow { 127.0.0.1; 10.101.11.23; }; };  controls { inet * allow { localhost; } keys { rndc-key; }; };  include "/etc/bind/rndc.key";  logging { category lame-servers { null; }; };  include "/etc/bind/named.conf.options"; include "/etc/bind/named.conf.local"; #include "/etc/bind/named.conf.default-zones"; #zone transfer key include "/etc/bind/robi_tsig.key"; root@dns1:~# cat /etc/bind/robi_tsig.key key "robi_tsig-key" { algorithm HMAC-MD5;</pre>



UAT of DNS for ROBI

	<pre>secret "U1fkYr5QEELIGBF5hrqt7P6x8tAw9+D5miMq2noOITz2fLN93B1YVr+NY0MxqNc9tdT xQSzbC                                     HpYKG8Ga/qKTYg==" };  server 10.101.11.22 {     keys { robi_tsig-key; }; };</pre>
Result	Pass
Remarks	
Signature BDCOM	
Signature ROBI	