

## Email and Domain Information Gathering Tools

### Tool 1: Whois

```
$ whois gatesnotes.com
Domain Name: GATESNOTES.COM
Registry Domain ID: 1560999932_DOMAIN_COM-VRSN
Registrar WHOIS Server: whois.godaddy.com
Registrar URL: http://www.godaddy.com
Updated Date: 2022-10-30T04:56:43Z
Creation Date: 2009-07-01T18:10:45Z
Registry Expiry Date: 2027-07-01T18:10:45Z
Registrar: GoDaddy.com, LLC
Registrar IANA ID: 146
Registrar Abuse Contact Email: abuse@godaddy.com
Registrar Abuse Contact Phone: 480-624-2505
Domain Status: clientDeleteProhibited https://icann.org/epp#clientDeleteProhibited
Domain Status: clientRenewProhibited https://icann.org/epp#clientRenewProhibited
Domain Status: clientTransferProhibited https://icann.org/epp#clientTransferProhibited
Domain Status: clientUpdateProhibited https://icann.org/epp#clientUpdateProhibited
Name Server: NS1-01.AZURE-DNS.COM
Name Server: NS2-01.AZURE-DNS.NET
Name Server: NS3-01.AZURE-DNS.ORG
Name Server: NS4-01.AZURE-DNS.INFO
DNSSEC: unsigned
URL of the ICANN Whois Inaccuracy Complaint Form: https://www.icann.org/wicf/
>>> Last update of whois database: 2024-07-26T07:25:11Z <<<
```

#### Other info Retrieved

The Registry database contains ONLY .COM, .NET, .EDU domains and Registrars.

Domain Name: gatesnotes.com

Registry Domain ID: 1560999932\_DOMAIN\_COM-VRSN

Registrar WHOIS Server: whois.godaddy.com

Registrar URL: https://www.godaddy.com

Updated Date: 2019-09-11T15:42:20Z

Creation Date: 2009-07-01T13:10:45Z

Registrar Registration Expiration Date: 2027-07-01T13:10:45Z

Registrar: GoDaddy.com, LLC

Registrar IANA ID: 146

Registrar Abuse Contact Email: abuse@godaddy.com

Registrar Abuse Contact Phone: +1.4806242505

Domain Status: clientTransferProhibited https://icann.org/epp#clientTransferProhibited

Domain Status: clientUpdateProhibited <https://icann.org/epp#clientUpdateProhibited>

Domain Status: clientRenewProhibited <https://icann.org/epp#clientRenewProhibited>

Domain Status: clientDeleteProhibited <https://icann.org/epp#clientDeleteProhibited>

Registry Registrant ID: Not Available From Registry

Registrant Name: Registration Private

Registrant Organization: Domains By Proxy, LLC

Registrant Street: DomainsByProxy.com

Registrant Street: 100 S. Mill Ave, Suite 1600

Registrant City: Tempe

Registrant State/Province: Arizona

Registrant Postal Code: 85281

Registrant Country: US

Registrant Phone: +1.4806242599

Registrant Phone Ext:

Registrant Fax:

Registrant Fax Ext:

Registrant Email: Select Contact Domain Holder link at  
<https://www.godaddy.com/whois/results.aspx?domain=gatesnotes.com>

Registry Admin ID: Not Available From Registry

Admin Name: Registration Private

Admin Organization: Domains By Proxy, LLC

Admin Street: DomainsByProxy.com

Admin Street: 100 S. Mill Ave, Suite 1600

Admin City: Tempe

Admin State/Province: Arizona

Admin Postal Code: 85281

Admin Country: US

Admin Phone: +1.4806242599

Admin Phone Ext:

Admin Fax:

Admin Fax Ext:

Admin Email: Select Contact Domain Holder link at  
<https://www.godaddy.com/whois/results.aspx?domain=gatesnotes.com>

Registry Tech ID: Not Available From Registry

Tech Name: Registration Private

Tech Organization: Domains By Proxy, LLC

Tech Street: DomainsByProxy.com

Tech Street: 100 S. Mill Ave, Suite 1600

Tech City: Tempe

Tech State/Province: Arizona

Tech Postal Code: 85281

Tech Country: US

Tech Phone: +1.4806242599

Tech Phone Ext:

Tech Fax:

Tech Fax Ext:

Tech Email: Select Contact Domain Holder link at  
<https://www.godaddy.com/whois/results.aspx?domain=gatesnotes.com>

Name Server: NS1-01.AZURE-DNS.COM

Name Server: NS2-01.AZURE-DNS.NET

Name Server: NS3-01.AZURE-DNS.ORG

Name Server: NS4-01.AZURE-DNS.INFO

## Tool 2: theHarvester

```
(kali@kali)-[~]
└─$ theHarvester -d corvit.com
Read proxies.yaml from /home/kali/.theHarvester/proxies.yaml
*****
*
* theHarvester
*
*
* theHarvester 4.6.0
* Coded by Christian Martorella
* Edge-Security Research
* cmartorella@edge-security.com
*
*****

[*] No IPs found.

[*] No emails found.

[*] No hosts found.
```

## Tool 3: dig

```
(kali㉿kali)-[~]
$ dig gatesnotes.com

; <<>> DiG 9.19.21-1+b1-Debian <<>> gatesnotes.com
;; global options: +cmd
;; Got answer:
;; ->HEADER<- opcode: QUERY, status: NOERROR, id: 34100
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 0

;; QUESTION SECTION:
;gatesnotes.com.                IN      A

;; ANSWER SECTION:
gatesnotes.com.                 38      IN      A      40.90.219.59

;; Query time: 8 msec
;; SERVER: 192.168.43.53#53(192.168.43.53) (UDP)
;; WHEN: Fri Jul 26 03:39:14 EDT 2024
;; MSG SIZE rcvd: 48
```

## Tool 4: dnsrecon

```
(kali㉿kali)-[~]
$ dnsrecon -d gatesnotes.com
[*] std: Performing General Enumeration against: gatesnotes.com...
[-] DNSSEC is not configured for gatesnotes.com
[*] SOA ns1-01.azure-dns.com 13.107.236.1
[*] SOA ns1-01.azure-dns.com 2603:1061:0:700::1
[*] NS ns3-01.azure-dns.org 204.14.183.1
[*] NS ns3-01.azure-dns.org 2a01:111:4000:700::1
[*] NS ns4-01.azure-dns.info 208.84.5.1
[*] NS ns4-01.azure-dns.info 2620:1ec:bda:700::1
[*] NS ns1-01.azure-dns.com 13.107.236.1
[*] NS ns1-01.azure-dns.com 2603:1061:0:700::1
[*] NS ns2-01.azure-dns.net 150.171.21.1
[*] NS ns2-01.azure-dns.net 2620:1ec:8ec:700::1
[*] MX gatesnotes-com.mail.protection.outlook.com 52.101.194.17
[*] MX gatesnotes-com.mail.protection.outlook.com 52.101.10.5
[*] MX gatesnotes-com.mail.protection.outlook.com 52.101.9.17
[*] MX gatesnotes-com.mail.protection.outlook.com 52.101.10.14
[*] A gatesnotes.com 40.90.219.59
[*] TXT gatesnotes.com google-site-verification=VIk9j03licukUQM62EqWrJd9GVbGOAavlzjkVwAuHLE
[*] TXT gatesnotes.com google-site-verification=27YcmVdmcvodSYYNID5iXdhmRL99mmMmuR1w9IZqGVw
[*] TXT gatesnotes.com facebook-domain-verification=udi4koqvog264fzyrci19h0bezp1l9
[*] TXT gatesnotes.com 150j/wW5j1eL0+6bjpj1vRZxEH1mDRzHBALVeFI5QBSN+prShtQE6TW0FXrhoy32r6ejFdKwfi2U+Uj2txwNRQ=
[*] TXT gatesnotes.com google-site-verification=Jnt34X_c-b704rgxluRMsVvc520WWOhpxMxTJ0hqaek
[*] TXT gatesnotes.com MS=ms34128104
[*] TXT gatesnotes.com google-site-verification=Wcb-IoFK1b24NCTlKjWV2G9FibHKL3llCxo60Mwqru0
[*] TXT gatesnotes.com v=spf1 mx a ip4:167.89.58.173 include:sendgrid.net include:customers.clickdimensions.com i
[*] TXT _dmarc.gatesnotes.com v=DMARC1; p=none; pct=100; aspf=r; adkim=r; rua=mailto:dmarcagg@gatesventures.com;
o=1
[*] Enumerating SRV Records
[-] No SRV Records Found for gatesnotes.com
```

## Tool 5: host

```
(kali㉿kali)-[~]
$ host learneasy.pk
learneasy.pk has address 154.41.235.145
learneasy.pk has IPv6 address 2a02:4780:3d:e188:4ecb:1690:11c:3ac3
learneasy.pk mail is handled by 5 mx1.hostinger.com.
learneasy.pk mail is handled by 10 mx2.hostinger.com.

(kali㉿kali)-[~]
$ host gatesnotes.com
gatesnotes.com has address 40.90.219.59
gatesnotes.com mail is handled by 0 gatesnotes-com.mail.protection.outlook.com.

(kali㉿kali)-[~]
$ host soldierspeaks.org
soldierspeaks.org has address 208.109.22.199
soldierspeaks.org mail is handled by 10 mail.soldierspeaks.org.
```

## Metadata Analysis Tools

### Tool 1: exiftool

```
(kali㉿kali)-[~]
$ exiftool Downloads/threat_img.jpeg
ExifTool Version Number      : 12.76
File Name                    : threat_img.jpeg
Directory                    : Downloads
File Size                    : 10 kB
File Modification Date/Time   : 2024:07:26 04:00:53-04:00
File Access Date/Time        : 2024:07:26 04:00:53-04:00
File Inode Change Date/Time   : 2024:07:26 04:00:53-04:00
File Permissions              : -rw-rw-r--
File Type                    : JPEG
File Type Extension          : jpg
MIME Type                    : image/jpeg
JFIF Version                 : 1.01
Resolution Unit               : None
X Resolution                  : 1
Y Resolution                  : 1
Image Width                   : 275
Image Height                  : 183
Encoding Process              : Baseline DCT, Huffman coding
Bits Per Sample               : 8
Color Components              : 3
Y Cb Cr Sub Sampling         : YCbCr4:2:0 (2 2)
Image Size                    : 275x183
Megapixels                    : 0.050
```

### Tool 2: stat

```
(kali㉿kali)-[~]
$ stat Downloads/threat_img.jpeg
File: Downloads/threat_img.jpeg
Size: 10390      Blocks: 24      IO Block: 4096   regular file
Device: 8,1     Inode: 1579917   Links: 1
Access: (0664/-rw-rw-r--)  Uid: ( 1000/   kali)   Gid: ( 1000/   kali)
Access: 2024-07-26 04:09:10.153909148 -0400
Modify: 2024-07-26 04:00:53.509705922 -0400
Change: 2024-07-26 04:00:53.621761923 -0400
Birth: 2024-07-26 04:00:53.425663921 -0400
```

### Tool 3: file

```
(kali㉿kali)-[~]
$ file Downloads/threat_img.jpeg
Downloads/threat_img.jpeg: JPEG image data, JFIF standard 1.01, aspect ratio, density 1x1, segment length 16, baseline, precision 8, 275x183, components 3
```

#### Tool 4: md5sum

```
(kali㉿kali)-[~]  
$ md5sum Downloads/threat_img.jpeg  
0fa31e4722624d8d44c820cbcf2eb744 Downloads/threat_img.jpeg
```

## DNS Enumeration Tools

#### Tool 1: dig

```
(kali㉿kali)-[~]  
$ dig soldierspeaks.org  
  
; <<>> DiG 9.19.21-1+b1-Debian <<>> soldierspeaks.org  
;; global options: +cmd  
;; Got answer:  
;; ->HEADER<- opcode: QUERY, status: NOERROR, id: 33587  
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 0  
  
;; QUESTION SECTION:  
;soldierspeaks.org.                IN      A  
  
;; ANSWER SECTION:  
soldierspeaks.org.                2553    IN      A      208.109.22.199  
  
;; Query time: 60 msec  
;; SERVER: 192.168.43.53#53(192.168.43.53) (UDP)  
;; WHEN: Fri Jul 26 04:16:38 EDT 2024  
;; MSG SIZE rcvd: 51
```

#### Tool 2: nslookup

```
(kali㉿kali)-[~]  
$ nslookup -d soldierspeaks.org  
*** Invalid option: d  
Server:          192.168.43.53  
Address:         192.168.43.53#53  
  
Non-authoritative answer:  
Name:   soldierspeaks.org  
Address: 208.109.22.199  
  
(kali㉿kali)-[~]  
$ nslookup -d gatesnotes.com  
*** Invalid option: d  
Server:          192.168.43.53  
Address:         192.168.43.53#53  
  
Non-authoritative answer:  
Name:   gatesnotes.com  
Address: 40.90.219.59
```

### Tool 3: dnsenum

```
(kali㉿kali)-[~]
$ dnsenum soldierspeaks.org
dnsenum VERSION:1.3.1

— soldierspeaks.org —

Host's addresses:
_____
soldierspeaks.org.                2228      IN      A       208.109.22.199

Name Servers:
_____
ns10.wixdns.net.                 104347    IN      A       216.239.36.100
ns11.wixdns.net.                 104347    IN      A       216.239.38.100

Mail (MX) Servers:
_____
mail.soldierspeaks.org.          3600      IN      A       208.109.22.199

Trying Zone Transfers and getting Bind Versions:
_____

Trying Zone Transfer for soldierspeaks.org on ns11.wixdns.net ...
AXFR record query failed: REFUSED
```

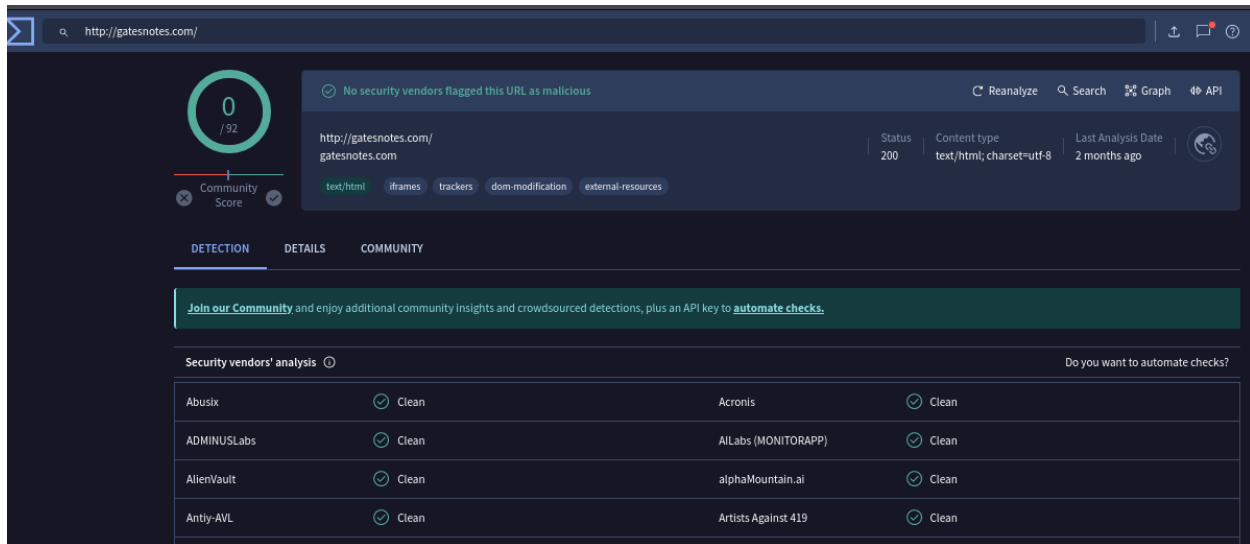
### Tool 4: dnsmap

```
(kali㉿kali)-[~]
$ dnsmap gatesnotes.com
dnsmap 0.36 - DNS Network Mapper

[+] searching (sub)domains for gatesnotes.com using built-in wordlist
[+] using maximum random delay of 10 millisecond(s) between requests
```



## Tool 5: Virus Total



The screenshot shows the Virus Total interface for the URL `http://gatesnotes.com/`. At the top, a green circle indicates a score of 0 out of 92. A message states: "No security vendors flagged this URL as malicious". The status is 200, content type is text/html, and the last analysis was 2 months ago. Below this, a table lists security vendors and their analysis results.

Security vendors' analysis		Do you want to automate checks?	
Abusix	✓ Clean	Acronis	✓ Clean
ADMINUSLabs	✓ Clean	AlLabs (MONITORAPP)	✓ Clean
AlienVault	✓ Clean	alphaMountain.ai	✓ Clean
Antiy-AVL	✓ Clean	Artists Against 419	✓ Clean

## Enumeration of Network Services

### Tool 1: enum4linux

```
(kali㉿kali)-[~]
$ enum4linux -U -o gatesnotes.com
Starting enum4linux v0.9.1 ( http://labs.portcullis.co.uk/application/enum4linux/ ) on Fri Jul 26 04:35:16 2024

===== ( Target Information ) =====

Target ..... gatesnotes.com
RID Range ..... 500-550,1000-1050
Username ..... ''
Password ..... ''
Known Usernames .. administrator, guest, krbtgt, domain admins, root, bin, none

===== ( Enumerating Workgroup/Domain on gatesnotes.com ) =====

[E] Can't find workgroup/domain

===== ( Session Check on gatesnotes.com ) =====

[E] Server doesn't allow session using username '', password ''. Aborting remainder of tests.
```

## Tool 2: nmap

```
(kali㉿kali)-[~]
$ nmap -d gatesnotes.com
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-07-26 04:36 EDT
PORTS: Using ports open on 0% or more average hosts (TCP:1000, UDP:0, SCTP:0)

----- Timing report -----
hostgroups: min 1, max 100000  valid
rtt-timeouts: init 1000, min 100, max 10000
max-scan-delay: TCP 1000, UDP 1000, SCTP 1000
parallelism: min 0, max 0
max-retries: 10, host-timeout: 0
min-rate: 0, max-rate: 0
-----

Initiating Ping Scan at 04:36
Scanning gatesnotes.com (40.90.219.59) [2 ports]
Completed Ping Scan at 04:36, 0.36s elapsed (1 total hosts)
Overall sending rates: 5.57 packets / s.
mass_rdns: Using DNS server 192.168.43.53
Initiating Parallel DNS resolution of 1 host. at 04:36
mass_rdns: 0.45s 0/1 [#: 1, OK: 0, NX: 0, DR: 0, SF: 0, TR: 1]
Completed Parallel DNS resolution of 1 host. at 04:36, 0.45s elapsed
DNS resolution of 1 IPs took 0.45s. Mode: Async [#: 1, OK: 0, NX: 1, DR: 0, SF: 0, TR: 1, CN: 0]
Initiating Connect Scan at 04:36
Scanning gatesnotes.com (40.90.219.59) [1000 ports]
Discovered open port 443/tcp on 40.90.219.59
Discovered open port 80/tcp on 40.90.219.59 (a false positive!)
Completed Connect Scan at 04:36, 21.38s elapsed (1000 total ports)
Overall sending rates: 93.91 packets / s.
Nmap scan report for gatesnotes.com (40.90.219.59)
Host is up, received syn-ack (0.35s latency). view raw scan data
Scanned at 2024-07-26 04:36:31 EDT for 21s
Not shown: 998 filtered tcp ports (no-response)
PORT      STATE SERVICE REASON
80/tcp    open  http    syn-ack
443/tcp   open  https   syn-ack
Final times for host: srtt: 349295 rttvar: 27881  to: 460819
```

### Tool 3: netstat

```
(kali㉿kali)-[~]
$ netstat -ttnlp

Active Internet connections (w/o servers)
Proto Recv-Q Send-Q Local Address           Foreign Address         State
tcp        0      0 kali:59838             93.243.107.34.bc.:https ESTABLISHED
tcp        0      0 kali:39510             166.188.117.34.bc:https TIME_WAIT
udp        0      0 kali:bootpc            192.168.43.53:bootps    ESTABLISHED

Active UNIX domain sockets (w/o servers)
Proto RefCnt Flags               Type           State         I-Node  Path
unix  3 0000 [ ]               STREAM         CONNECTED     8844
unix  3 0000 [ ]               STREAM         CONNECTED     9624
unix  3 0000 [ ]               STREAM         CONNECTED     9318
unix  3 0000 [ ]               STREAM         CONNECTED     9657
unix  3 0000 [ ]               STREAM         CONNECTED     9288      /run/user/1000/at-spi/bus_0
unix  3 0000 [ ]               STREAM         CONNECTED     7656      /run/systemd/journal/stdout
unix  3 0000 [ ]               STREAM         CONNECTED     13487
unix  2 0000 [ ]               STREAM         CONNECTED     9909
unix  3 0000 [ ]               STREAM         CONNECTED     8905
unix  3 0000 [ ]               STREAM         CONNECTED     7985      /run/user/1000/at-spi/bus_0
unix  3 0000 [ ]               STREAM         CONNECTED     5009      /run/systemd/journal/stdout
unix  3 0000 [ ]               STREAM         CONNECTED     46913
unix  3 0000 [ ]               STREAM         CONNECTED     9379
unix  3 0000 [ ]               STREAM         CONNECTED     9077      /run/user/1000/_results.txt
unix  3 0000 [ ]               STREAM         CONNECTED     47898
unix  3 0000 [ ]               STREAM         CONNECTED     12919
unix  3 0000 [ ]               STREAM         CONNECTED     10654
unix  3 0000 [ ]               STREAM         CONNECTED     8159      /run/user/1000/at-spi/bus_0
unix  3 0000 [ ]               STREAM         CONNECTED     9025
unix  3 0000 [ ]               STREAM         CONNECTED     7764      /run/systemd/journal/stdout
```