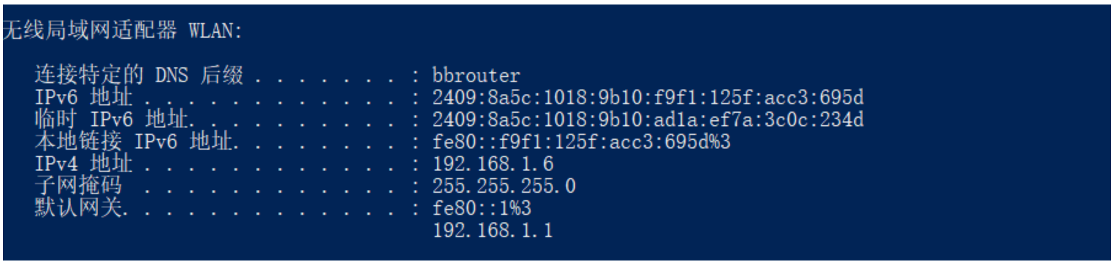
Lab0

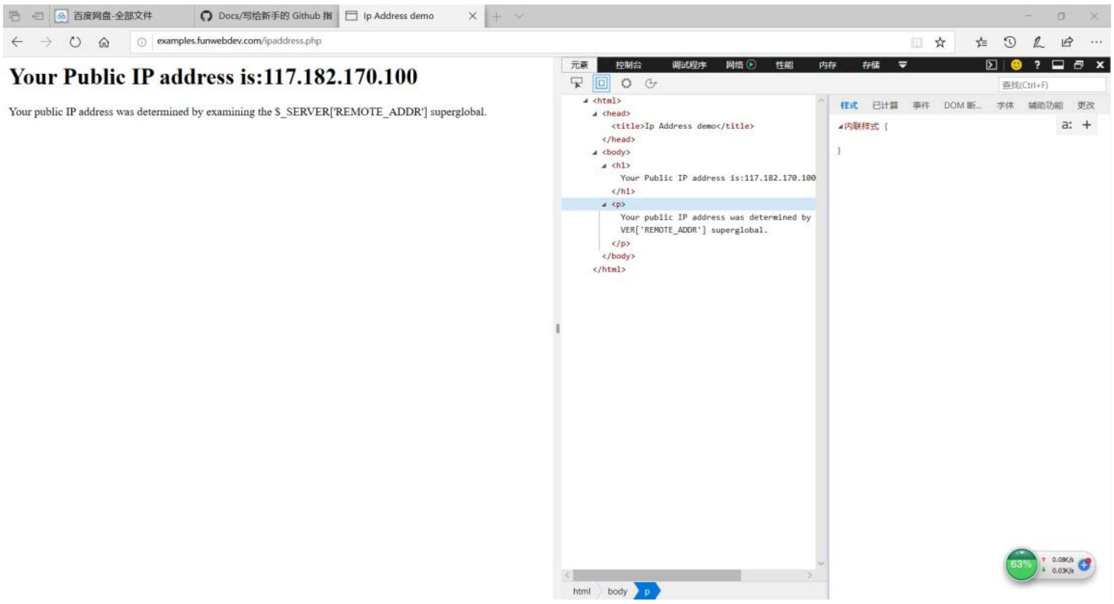
1. 我的 IP 地址



```
无线局域网适配器 WLAN:

   连接特定的 DNS 后缀 . . . . . . . : bbrouter
   IPv6 地址 . . . . . . . . . . . . : 2409:8a5c:1018:9b10:f9f1:125f:acc3:695d
   临时 IPv6 地址. . . . . . . . . . : 2409:8a5c:1018:9b10:ad1a:ef7a:3c0c:234d
   本地链接 IPv6 地址. . . . . . . . : fe80::f9f1:125f:acc3:695d%3
   IPv4 地址 . . . . . . . . . . . . : 192.168.1.6
   子网掩码  . . . . . . . . . . . . : 255.255.255.0
   默认网关. . . . . . . . . . . . . : fe80::1%3
                                       192.168.1.1
```

2. 分析 Microsoft Edge 的网页组成部分

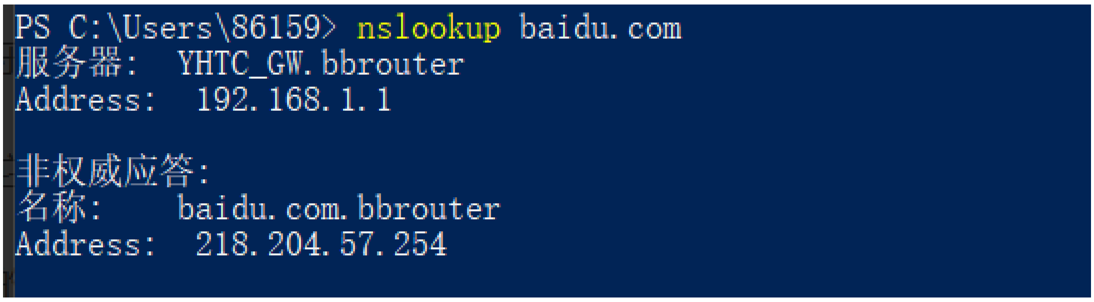


Your Public IP address is:117.182.170.100

Your public IP address was determined by examining the $_SERVER['REMOTE_ADDR'] superglobal.

```
<html>
  <head>
    <title>Ip Address demo</title>
  </head>
  <body>
    <h1>
      Your Public IP address is:117.182.170.100
    </h1>
    <p>
      Your public IP address was determined by
      VER['REMOTE_ADDR'] superglobal.
    </p>
  </body>
</html>
```

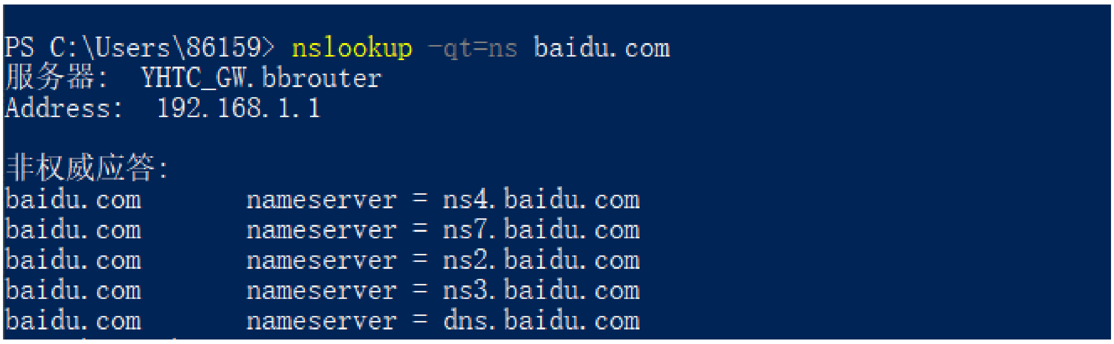
3.1）查询 baidu.com 的 A 地址记录



```
PS C:\Users\86159> nslookup baidu.com
服务器:  YHTC_GW.bbrouter
Address:  192.168.1.1

非权威应答:
名称:    baidu.com.bbrouter
Address:  218.204.57.254
```

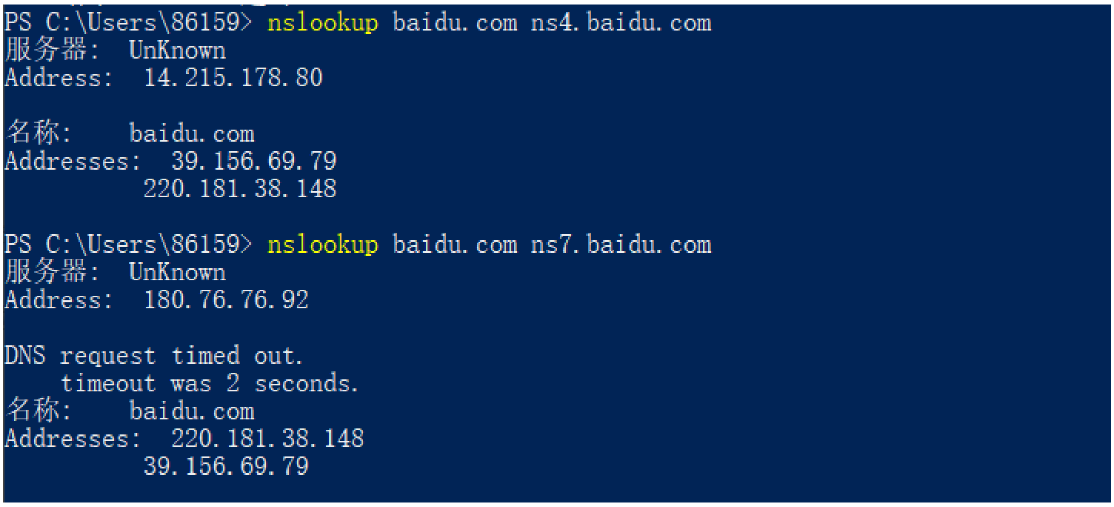
3.2）查询 baidu.com 的域名服务器



```
PS C:\Users\86159> nslookup -qt=ns baidu.com
服务器:  YHTC_GW.bbrouter
Address:  192.168.1.1

非权威应答:
baidu.com       nameserver = ns4.baidu.com
baidu.com       nameserver = ns7.baidu.com
baidu.com       nameserver = ns2.baidu.com
baidu.com       nameserver = ns3.baidu.com
baidu.com       nameserver = dns.baidu.com
```

3.3）使用授权服务器查询 baidu.com 的 IP 地址

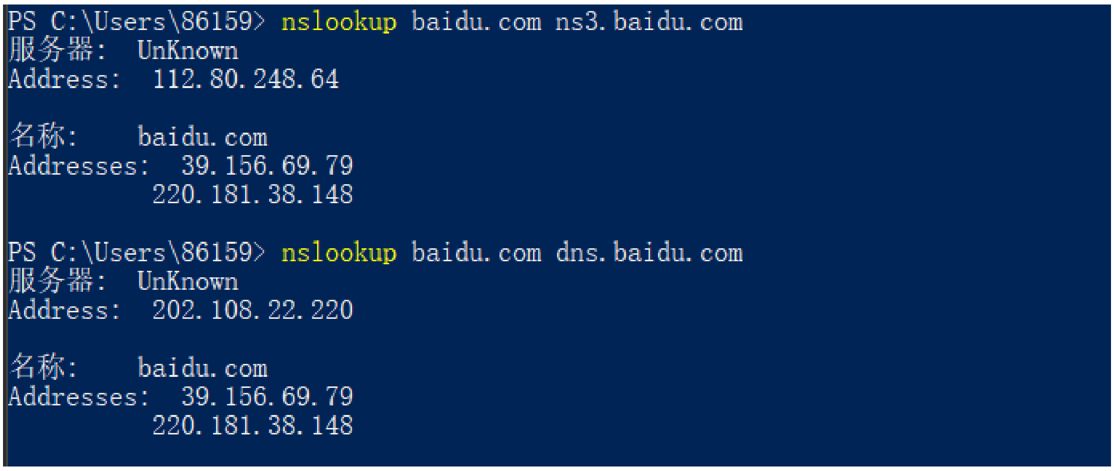


```
PS C:\Users\86159> nslookup baidu.com ns4.baidu.com
服务器:  UnKnown
Address:  14.215.178.80

名称:    baidu.com
Addresses:  39.156.69.79
          220.181.38.148

PS C:\Users\86159> nslookup baidu.com ns7.baidu.com
服务器:  UnKnown
Address:  180.76.76.92

DNS request timed out.
    timeout was 2 seconds.
名称:    baidu.com
Addresses:  220.181.38.148
          39.156.69.79
```



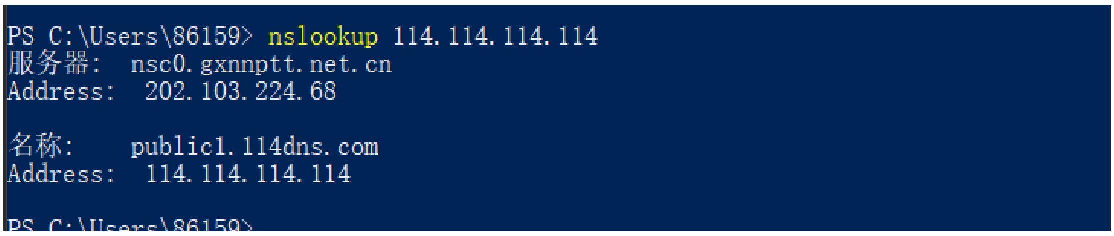
```
PS C:\Users\86159> nslookup baidu.com ns3.baidu.com
服务器:  UnKnown
Address:  112.80.248.64

名称:    baidu.com
Addresses:  39.156.69.79
          220.181.38.148

PS C:\Users\86159> nslookup baidu.com dns.baidu.com
服务器:  UnKnown
Address:  202.108.22.220

名称:    baidu.com
Addresses:  39.156.69.79
          220.181.38.148
```

3.4） 查询 114.114.114.114 匹配的主机名

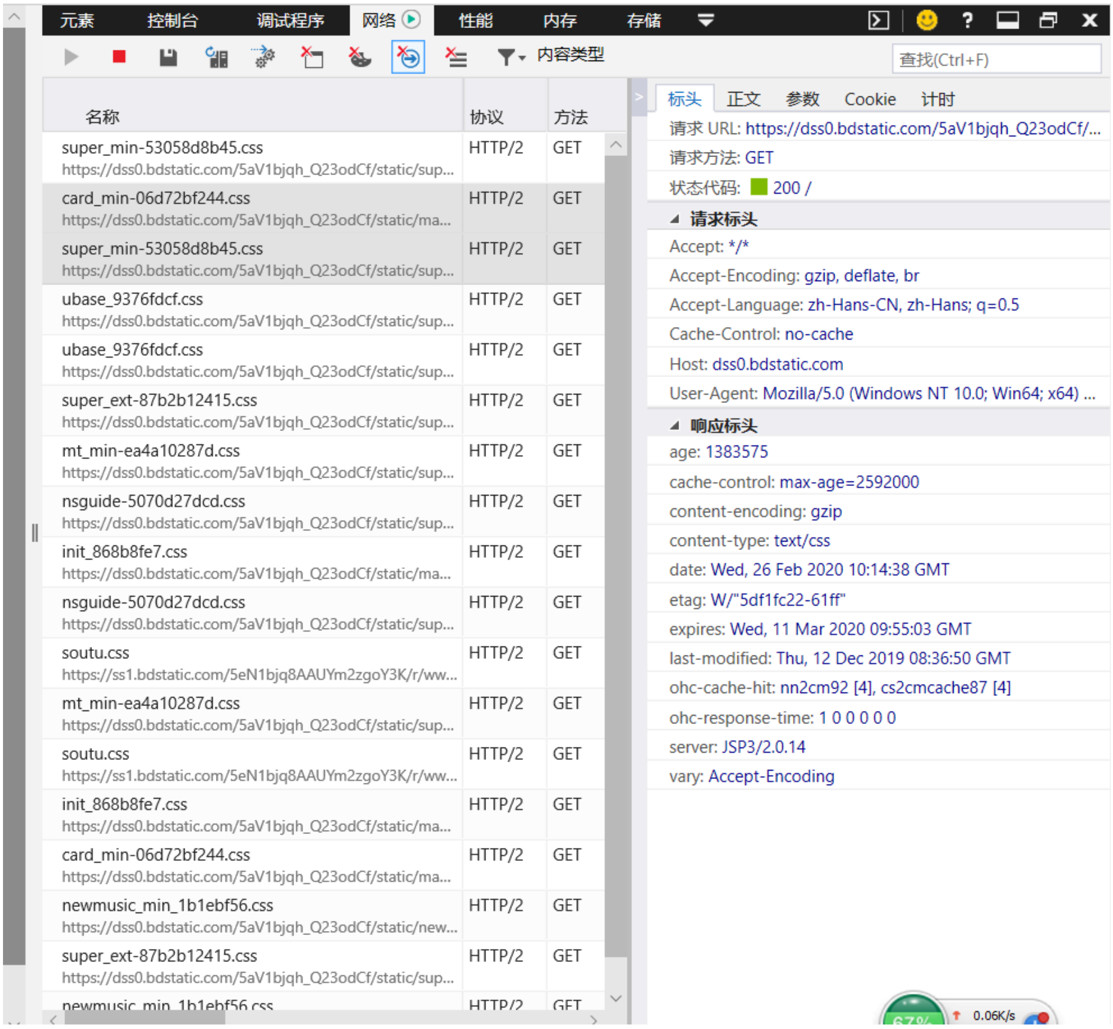


```
PS C:\Users\86159> nslookup 114.114.114.114
服务器:  nsc0.gxnnptt.net.cn
Address:  202.103.224.68

名称:    public1.114dns.com
Address:  114.114.114.114

PS C:\Users\86159>
```

4.观察 HTTP 标头



名称	协议	方法
super_min-53058d8b45.css https://dss0.bdstatic.com/5aV1bjqh_Q23odCf/static/sup...	HTTP/2	GET
card_min-06d72bf244.css https://dss0.bdstatic.com/5aV1bjqh_Q23odCf/static/ma...	HTTP/2	GET
super_min-53058d8b45.css https://dss0.bdstatic.com/5aV1bjqh_Q23odCf/static/sup...	HTTP/2	GET
ubase_9376fdcf.css https://dss0.bdstatic.com/5aV1bjqh_Q23odCf/static/sup...	HTTP/2	GET
ubase_9376fdcf.css https://dss0.bdstatic.com/5aV1bjqh_Q23odCf/static/sup...	HTTP/2	GET
super_ext-87b2b12415.css https://dss0.bdstatic.com/5aV1bjqh_Q23odCf/static/sup...	HTTP/2	GET
mt_min-ea4a10287d.css https://dss0.bdstatic.com/5aV1bjqh_Q23odCf/static/sup...	HTTP/2	GET
nsguide-5070d27dcd.css https://dss0.bdstatic.com/5aV1bjqh_Q23odCf/static/sup...	HTTP/2	GET
init_868b8fe7.css https://dss0.bdstatic.com/5aV1bjqh_Q23odCf/static/ma...	HTTP/2	GET
nsguide-5070d27dcd.css https://dss0.bdstatic.com/5aV1bjqh_Q23odCf/static/sup...	HTTP/2	GET
soutu.css https://ss1.bdstatic.com/5eN1bjq8AAUYm2zgoY3K/r/ww...	HTTP/2	GET
mt_min-ea4a10287d.css https://dss0.bdstatic.com/5aV1bjqh_Q23odCf/static/sup...	HTTP/2	GET
soutu.css https://ss1.bdstatic.com/5eN1bjq8AAUYm2zgoY3K/r/ww...	HTTP/2	GET
init_868b8fe7.css https://dss0.bdstatic.com/5aV1bjqh_Q23odCf/static/ma...	HTTP/2	GET
card_min-06d72bf244.css https://dss0.bdstatic.com/5aV1bjqh_Q23odCf/static/ma...	HTTP/2	GET
newmusic_min_1b1ebf56.css https://dss0.bdstatic.com/5aV1bjqh_Q23odCf/static/new...	HTTP/2	GET
super_ext-87b2b12415.css https://dss0.bdstatic.com/5aV1bjqh_Q23odCf/static/sup...	HTTP/2	GET
newmusic_min_1b1ebf56.css	HTTP/2	GET

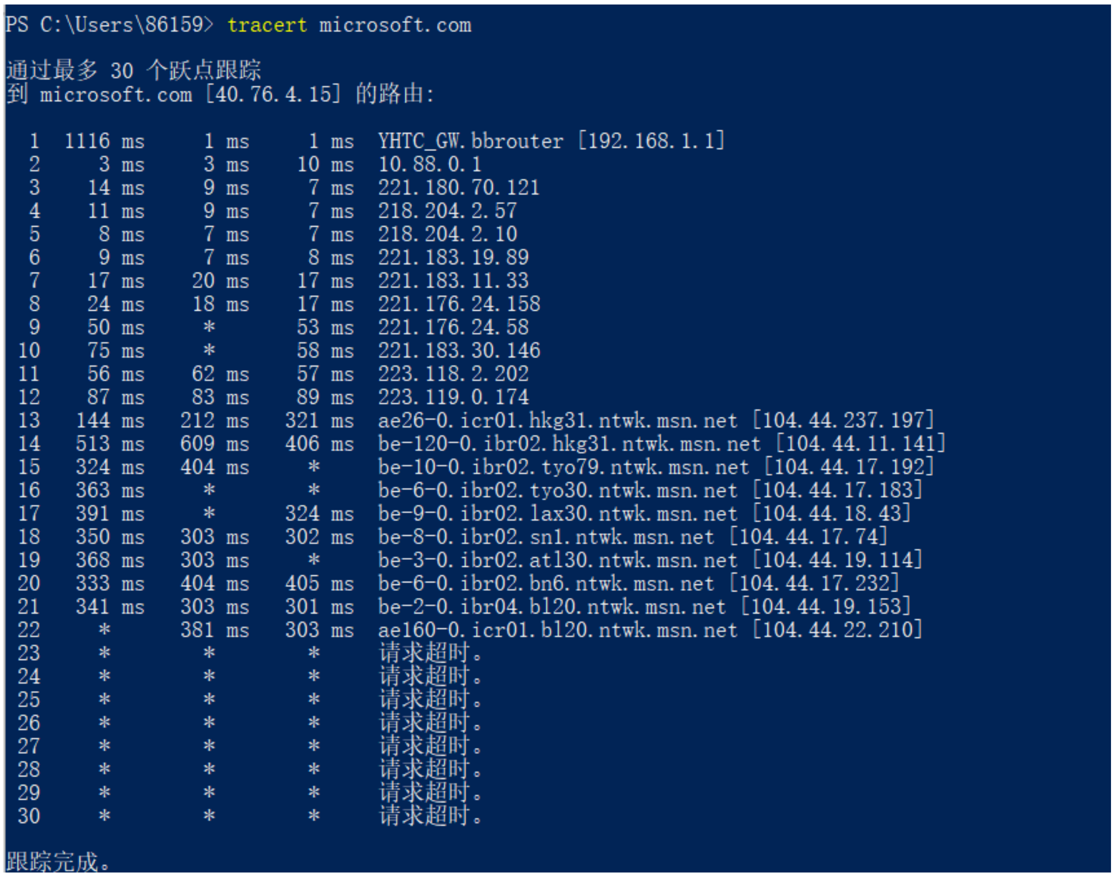
请求 URL: https://dss0.bdstatic.com/5aV1bjqh_Q23odCf/...
请求方法: GET
状态代码: 🟩 200 /

◢ 请求标头
Accept: */*
Accept-Encoding: gzip, deflate, br
Accept-Language: zh-Hans-CN, zh-Hans; q=0.5
Cache-Control: no-cache
Host: dss0.bdstatic.com
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) ...

◢ 响应标头
age: 1383575
cache-control: max-age=2592000
content-encoding: gzip
content-type: text/css
date: Wed, 26 Feb 2020 10:14:38 GMT
etag: W/"5df1fc22-61ff"
expires: Wed, 11 Mar 2020 09:55:03 GMT
last-modified: Thu, 12 Dec 2019 08:36:50 GMT
ohc-cache-hit: nn2cm92 [4], cs2cmcache87 [4]
ohc-response-time: 1 0 0 0 0 0
server: JSP3/2.0.14
vary: Accept-Encoding

5.1）追踪发往 microsoft.com 的数据包

（抱歉，总是会存在超时情况，以下是超时最少的情况）



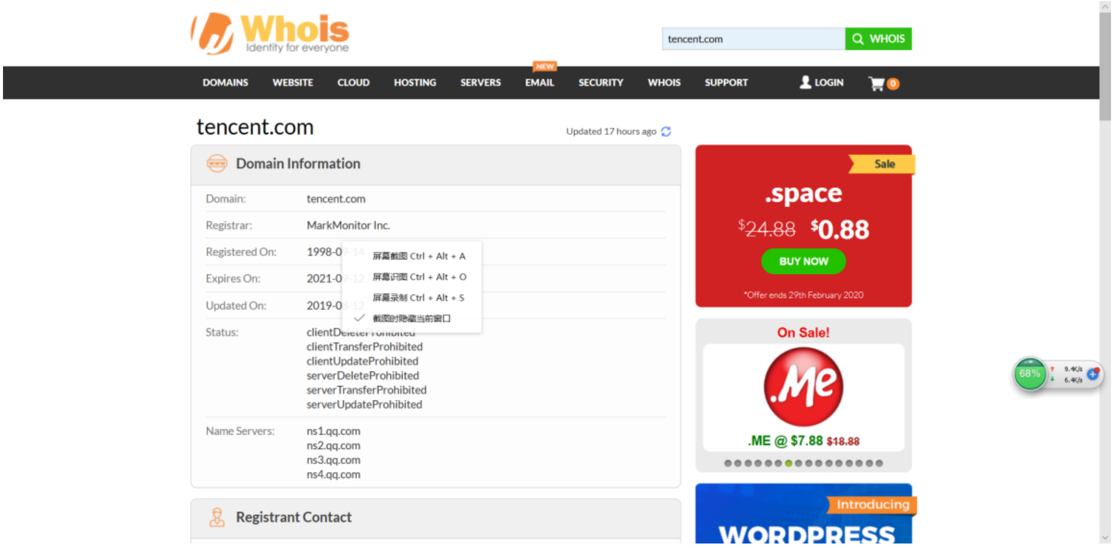
```
PS C:\Users\86159> tracert microsoft.com

通过最多 30 个跃点跟踪
到 microsoft.com [40.76.4.15] 的路由:

  1  1116 ms     1 ms     1 ms  YHTC_GW.bbrouter [192.168.1.1]
  2     3 ms     3 ms    10 ms  10.88.0.1
  3    14 ms     9 ms     7 ms  221.180.70.121
  4    11 ms     9 ms     7 ms  218.204.2.57
  5     8 ms     7 ms     7 ms  218.204.2.10
  6     9 ms     7 ms     8 ms  221.183.19.89
  7    17 ms    20 ms    17 ms  221.183.11.33
  8    24 ms    18 ms    17 ms  221.176.24.158
  9    50 ms     *       53 ms  221.176.24.58
 10    75 ms     *       58 ms  221.183.30.146
 11    56 ms    62 ms    57 ms  223.118.2.202
 12    87 ms    83 ms    89 ms  223.119.0.174
 13   144 ms   212 ms   321 ms  ae26-0.icr01.hkg31.ntwk.msn.net [104.44.237.197]
 14   513 ms   609 ms   406 ms  be-120-0.ibr02.hkg31.ntwk.msn.net [104.44.11.141]
 15   324 ms   404 ms     *      be-10-0.ibr02.tyo79.ntwk.msn.net [104.44.17.192]
 16   363 ms     *        *      be-6-0.ibr02.tyo30.ntwk.msn.net [104.44.17.183]
 17   391 ms     *      324 ms  be-9-0.ibr02.lax30.ntwk.msn.net [104.44.18.43]
 18   350 ms   303 ms   302 ms  be-8-0.ibr02.sn1.ntwk.msn.net [104.44.17.74]
 19   368 ms   303 ms     *      be-3-0.ibr02.atl30.ntwk.msn.net [104.44.19.114]
 20   333 ms   404 ms   405 ms  be-6-0.ibr02.bn6.ntwk.msn.net [104.44.17.232]
 21   341 ms   303 ms   301 ms  be-2-0.ibr04.bl20.ntwk.msn.net [104.44.19.153]
 22     *      381 ms   303 ms  ae160-0.icr01.bl20.ntwk.msn.net [104.44.22.210]
 23     *        *        *     请求超时。
 24     *        *        *     请求超时。
 25     *        *        *     请求超时。
 26     *        *        *     请求超时。
 27     *        *        *     请求超时。
 28     *        *        *     请求超时。
 29     *        *        *     请求超时。
 30     *        *        *     请求超时。

跟踪完成。
```

5.2）利用 whois 查询 tencent.com 的信息



tencent.com

Updated 17 hours ago

Domain Information

Domain: tencent.com

Registrar: MarkMonitor Inc.

Registered On: 1998-0

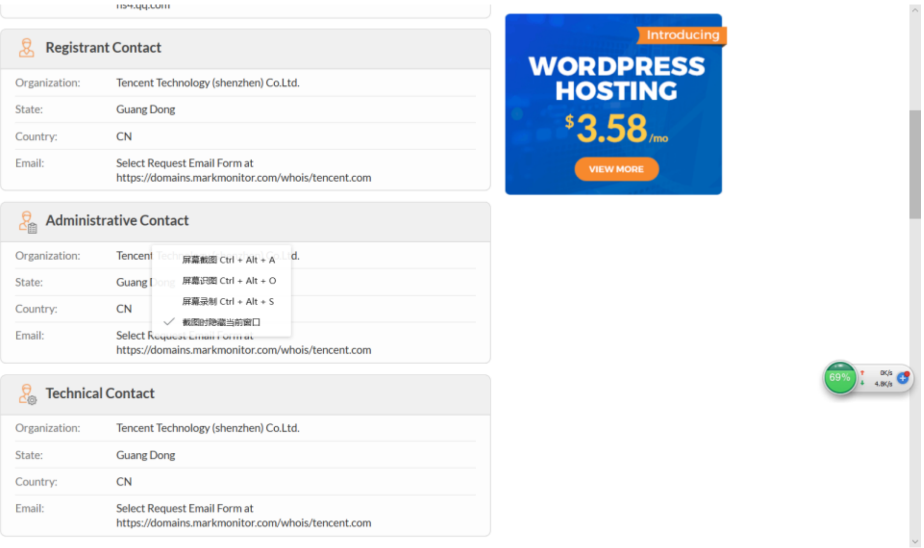
Expires On: 2021-0

Updated On: 2019-0

Status: clientDeleteProhibited
clientTransferProhibited
clientUpdateProhibited
serverDeleteProhibited
serverTransferProhibited
serverUpdateProhibited

Name Servers: ns1.qq.com
ns2.qq.com
ns3.qq.com
ns4.qq.com

Registrant Contact



ns4.qq.com

Registrant Contact

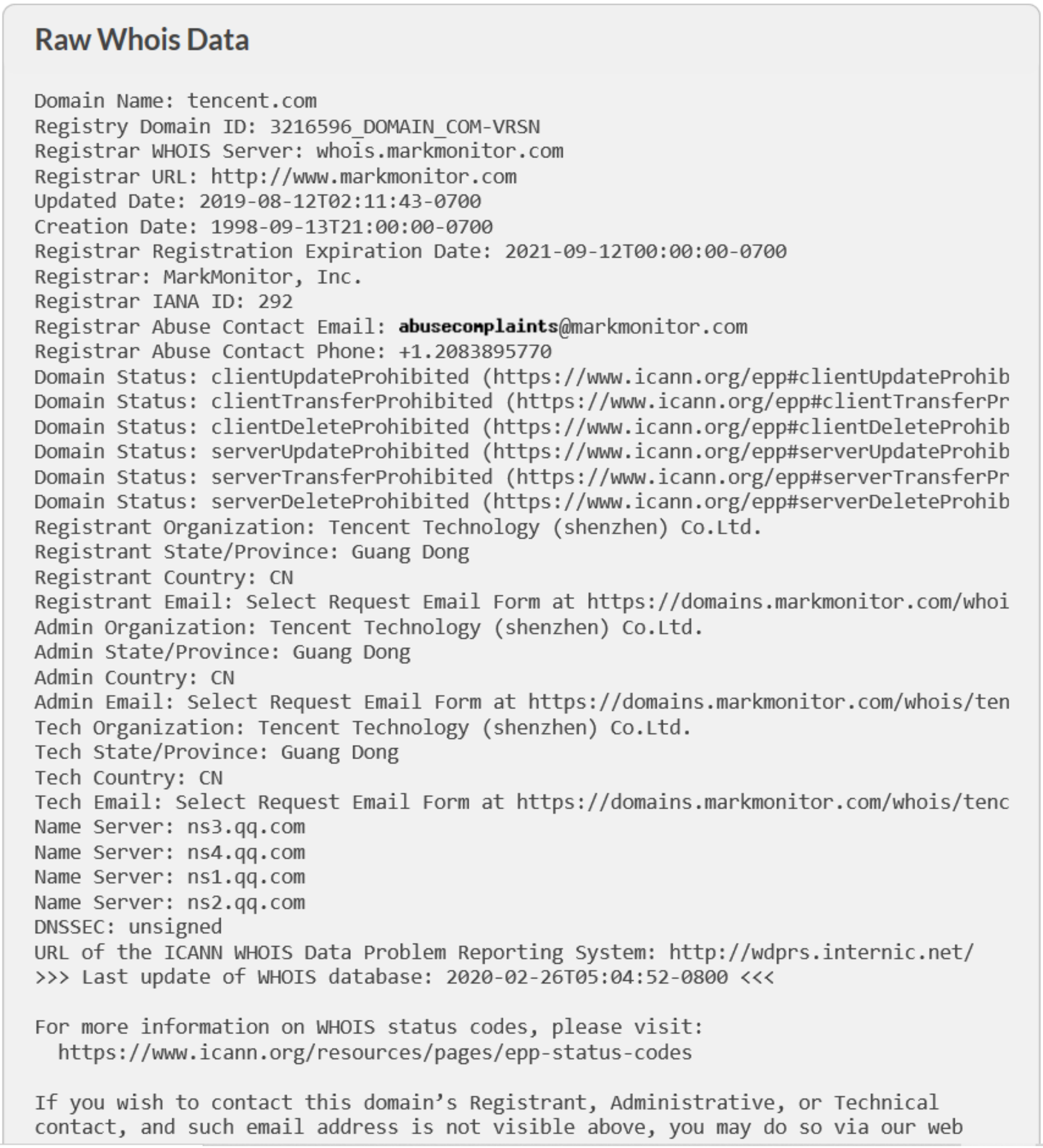
Organization:	Tencent Technology (shenzhen) Co.Ltd.
State:	Guang Dong
Country:	CN
Email:	Select Request Email Form at https://domains.markmonitor.com/whois/tencent.com

Administrative Contact

Organization:	Tencent Technology (shenzhen) Co.Ltd.
State:	Guang Dong
Country:	CN
Email:	Select Request Email Form at https://domains.markmonitor.com/whois/tencent.com

Technical Contact

Organization:	Tencent Technology (shenzhen) Co.Ltd.
State:	Guang Dong
Country:	CN
Email:	Select Request Email Form at https://domains.markmonitor.com/whois/tencent.com

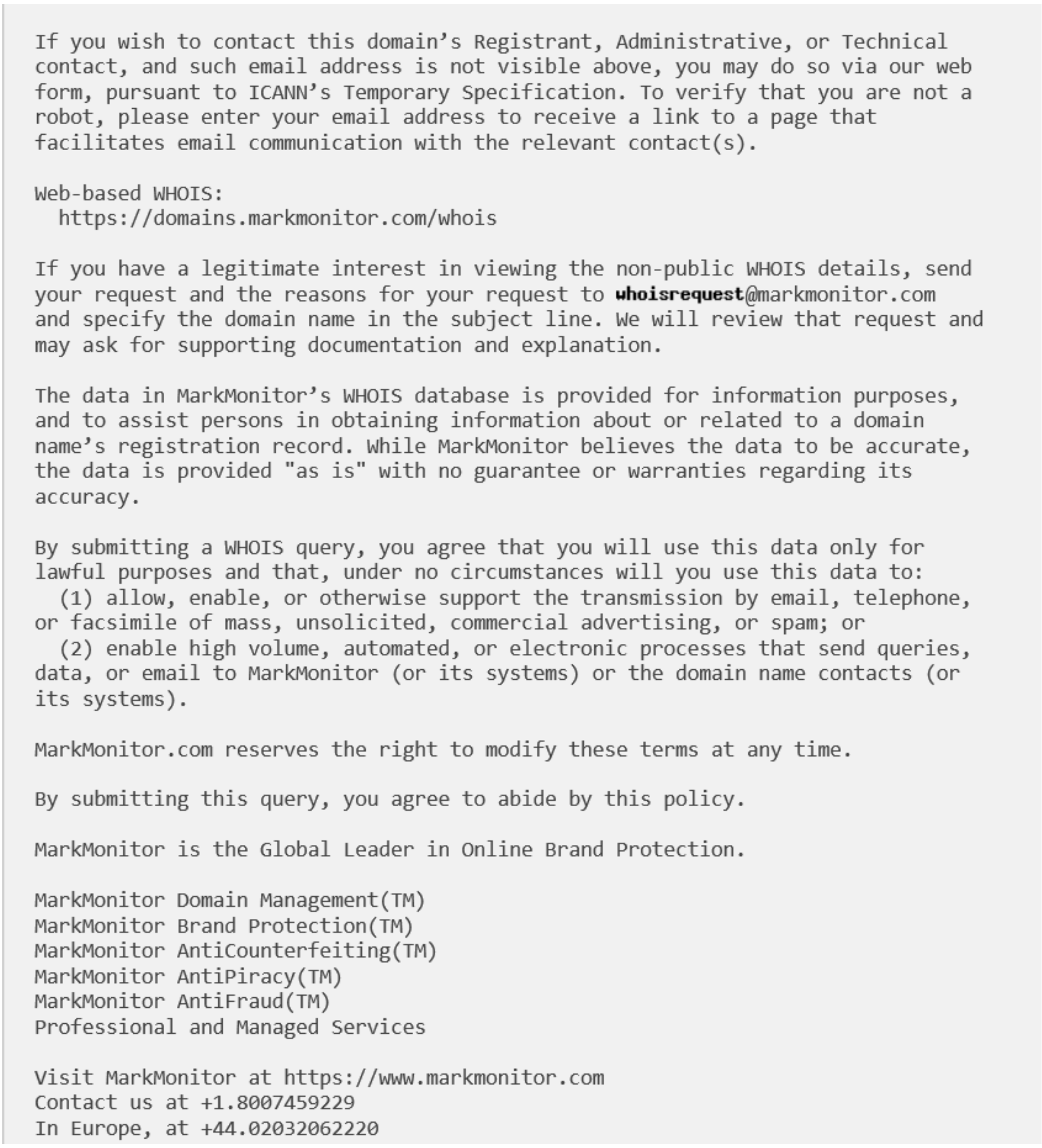


Raw Whois Data

```
Domain Name: tencent.com
Registry Domain ID: 3216596_DOMAIN_COM-VRSN
Registrar WHOIS Server: whois.markmonitor.com
Registrar URL: http://www.markmonitor.com
Updated Date: 2019-08-12T02:11:43-0700
Creation Date: 1998-09-13T21:00:00-0700
Registrar Registration Expiration Date: 2021-09-12T00:00:00-0700
Registrar: MarkMonitor, Inc.
Registrar IANA ID: 292
Registrar Abuse Contact Email: abusecomplaints@markmonitor.com
Registrar Abuse Contact Phone: +1.2083895770
Domain Status: clientUpdateProhibited (https://www.icann.org/epp#clientUpdateProhib
Domain Status: clientTransferProhibited (https://www.icann.org/epp#clientTransferPr
Domain Status: clientDeleteProhibited (https://www.icann.org/epp#clientDeleteProhib
Domain Status: serverUpdateProhibited (https://www.icann.org/epp#serverUpdateProhib
Domain Status: serverTransferProhibited (https://www.icann.org/epp#serverTransferPr
Domain Status: serverDeleteProhibited (https://www.icann.org/epp#serverDeleteProhib
Registrant Organization: Tencent Technology (shenzhen) Co.Ltd.
Registrant State/Province: Guang Dong
Registrant Country: CN
Registrant Email: Select Request Email Form at https://domains.markmonitor.com/whoi
Admin Organization: Tencent Technology (shenzhen) Co.Ltd.
Admin State/Province: Guang Dong
Admin Country: CN
Admin Email: Select Request Email Form at https://domains.markmonitor.com/whois/ten
Tech Organization: Tencent Technology (shenzhen) Co.Ltd.
Tech State/Province: Guang Dong
Tech Country: CN
Tech Email: Select Request Email Form at https://domains.markmonitor.com/whois/tenc
Name Server: ns3.qq.com
Name Server: ns4.qq.com
Name Server: ns1.qq.com
Name Server: ns2.qq.com
DNSSEC: unsigned
URL of the ICANN WHOIS Data Problem Reporting System: http://wdprs.internic.net/
>>> Last update of WHOIS database: 2020-02-26T05:04:52-0800 <<<

For more information on WHOIS status codes, please visit:
  https://www.icann.org/resources/pages/epp-status-codes

If you wish to contact this domain’s Registrant, Administrative, or Technical
contact, and such email address is not visible above, you may do so via our web
```



```
If you wish to contact this domain’s Registrant, Administrative, or Technical
contact, and such email address is not visible above, you may do so via our web
form, pursuant to ICANN’s Temporary Specification. To verify that you are not a
robot, please enter your email address to receive a link to a page that
facilitates email communication with the relevant contact(s).

Web-based WHOIS:
  https://domains.markmonitor.com/whois

If you have a legitimate interest in viewing the non-public WHOIS details, send
your request and the reasons for your request to whoisrequest@markmonitor.com
and specify the domain name in the subject line. We will review that request and
may ask for supporting documentation and explanation.

The data in MarkMonitor’s WHOIS database is provided for information purposes,
and to assist persons in obtaining information about or related to a domain
name’s registration record. While MarkMonitor believes the data to be accurate,
the data is provided "as is" with no guarantee or warranties regarding its
accuracy.

By submitting a WHOIS query, you agree that you will use this data only for
lawful purposes and that, under no circumstances will you use this data to:
  (1) allow, enable, or otherwise support the transmission by email, telephone,
or facsimile of mass, unsolicited, commercial advertising, or spam; or
  (2) enable high volume, automated, or electronic processes that send queries,
data, or email to MarkMonitor (or its systems) or the domain name contacts (or
its systems).

MarkMonitor.com reserves the right to modify these terms at any time.

By submitting this query, you agree to abide by this policy.

MarkMonitor is the Global Leader in Online Brand Protection.

MarkMonitor Domain Management(TM)
MarkMonitor Brand Protection(TM)
MarkMonitor AntiCounterfeiting(TM)
MarkMonitor AntiPiracy(TM)
MarkMonitor AntiFraud(TM)
Professional and Managed Services

Visit MarkMonitor at https://www.markmonitor.com
Contact us at +1.8007459229
In Europe, at +44.02032062220
```