

一、IP Address

```
以太网适配器 VMware Network Adapter VMnet1:

    连接特定的 DNS 后缀 . . . . . : 
    本地链接 IPv6 地址. . . . . : fe80::e035:8c59:c150:c0fa%21
    IPv4 地址 . . . . . : 192.168.75.1
    子网掩码 . . . . . : 255.255.255.0
    默认网关. . . . . : 

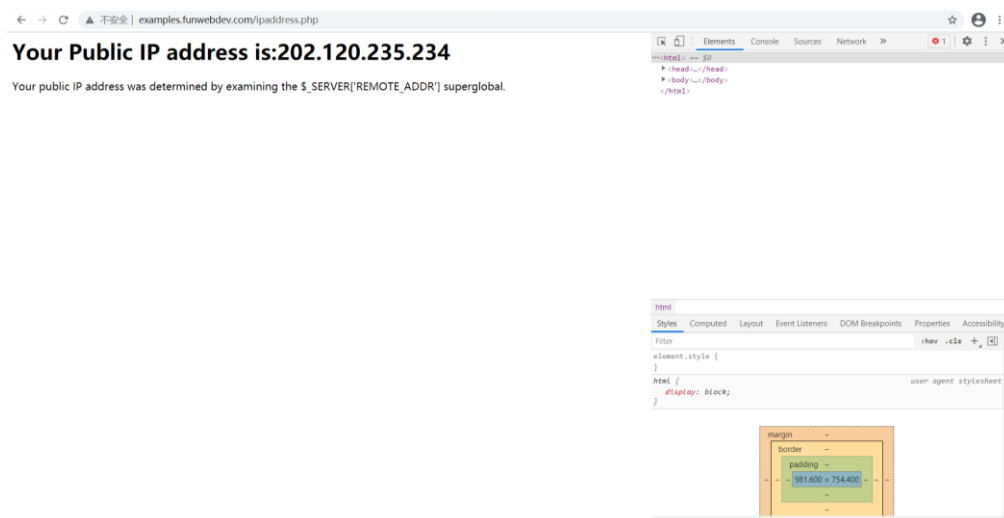
以太网适配器 VMware Network Adapter VMnet8:

    连接特定的 DNS 后缀 . . . . . : 
    本地链接 IPv6 地址. . . . . : fe80::119:7f6d:d9e1:788f%20
    IPv4 地址 . . . . . : 192.168.219.1
    子网掩码 . . . . . : 255.255.255.0
    默认网关. . . . . : 

无线局域网适配器 WLAN:

    连接特定的 DNS 后缀 . . . . . : fudan.edu.cn
    本地链接 IPv6 地址. . . . . : fe80::813a:75d0:1677:6291%15
    IPv4 地址 . . . . . : 10.222.199.250
    子网掩码 . . . . . : 255.255.128.0
    默认网关. . . . . : 10.222.128.1
```

二、分析网页的组成部分



三、域名服务器

1、使用 nslookup 查询 baidu.com 的 A 地址记录截图

```

PS C:\Users\liaoy> nslookup baidu.com
服务器: ns.fudan.edu.cn
Address: 202.120.224.26

非权威应答:
名称: baidu.com
Addresses: 39.156.69.79
           220.181.38.148

PS C:\Users\liaoy> nslookup -qt=A baidu.com
服务器: ns.fudan.edu.cn
Address: 202.120.224.26

非权威应答:
名称: baidu.com
Addresses: 39.156.69.79
           220.181.38.148

```

2、使用 nslookup 查询 baidu.com 的域名服务器截图

```

PS C:\Users\liaoy> nslookup -qt=ns baidu.com
服务器: ns-cx1.online.sh.cn
Address: 116.228.111.18

DNS request timed out.
        timeout was 2 seconds.
非权威应答:
baidu.com       nameserver = ns2.baidu.com
baidu.com       nameserver = ns7.baidu.com
baidu.com       nameserver = ns4.baidu.com
baidu.com       nameserver = ns3.baidu.com
baidu.com       nameserver = dns.baidu.com

```

3、使用授权服务器查询 baidu.com 的 IP 地址截图

```

PS C:\Users\liaoy> nslookup baidu.com ns2.baidu.com
服务器: UnKnown
Address: 220.181.33.31

名称: baidu.com
Addresses: 220.181.38.148
           39.156.69.79

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

名称: baidu.com
Addresses: 220.181.38.148
           39.156.69.79

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

名称: baidu.com
Addresses: 220.181.38.148
           39.156.69.79

PS C:\Users\liaoy> 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\liaoy> nslookup baidu.com dns.baidu.com
服务器: UnKnown
Address: 110.242.68.134

名称: baidu.com
Addresses: 220.181.38.148
           39.156.69.79

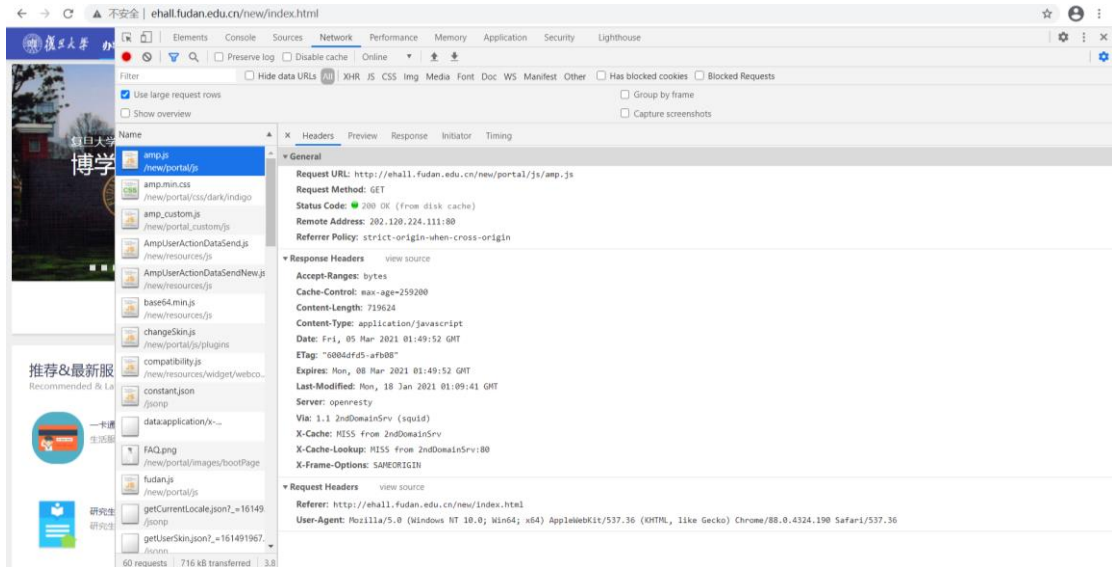
```

4、查询 114.114.114.114 匹配的主机名的截图

```
PS C:\Users\liaoy> nslookup 114.114.114.114
服务器: ns-cx1.online.sh.cn
Address: 116.228.111.18

名称: public1.114dns.com
Address: 114.114.114.114
```

四、观察 HTTP 标头



五、追踪数据包

1、跟踪一个从计算机发往 microsoft.com 的数据包

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

通过最多 30 个跃点跟踪
到 microsoft.com [40.113.200.201] 的路由:

 1  26 ms    15 ms    14 ms    10.223.128.1
 2  11 ms    10 ms     9 ms    10.250.1.210
 3   *        *        *        请求超时。
 4  11 ms    21 ms    10 ms    10.255.19.1
 5  13 ms    13 ms    11 ms    10.255.249.45
 6  15 ms    15 ms    16 ms    10.255.38.250
 7   *        *        *        请求超时。
 8  14 ms    11 ms    12 ms    101.4.115.105
 9  35 ms    31 ms    30 ms    101.4.117.30
10  39 ms    38 ms    36 ms    101.4.116.118
11  41 ms    45 ms    46 ms    101.4.112.69
12  54 ms    38 ms    51 ms    101.4.113.110
13  40 ms    40 ms    41 ms    101.4.116.78
14  42 ms    41 ms    40 ms    101.4.117.102
15  217 ms   199 ms   203 ms    101.4.117.214
16  351 ms   220 ms   287 ms    ix-xe-9-1-5-0.tcore1.lvw-losangeles.as6453.net [66.110.59.181]
17  247 ms   304 ms   201 ms    if-ae-8-3.tcore1.svl-santaclara.as6453.net [63.243.250.58]
18   *        273 ms   *        if-ae-0-2.tcore2.svl-santaclara.as6453.net [63.243.251.2]
19  303 ms   191 ms   206 ms    if-ae-7-2.tcore1.pdi-paloalto.as6453.net [209.58.86.74]
20  196 ms   304 ms   299 ms    66.198.127.161
21  214 ms   309 ms   299 ms    ae26-0.icr02.by21.ntwk.msn.net [104.44.239.0]
22  306 ms   406 ms   294 ms    be-122-0.ibr03.by21.ntwk.msn.net [104.44.22.169]
23  295 ms   256 ms   352 ms    be-6-0.ibr03.cys04.ntwk.msn.net [104.44.28.210]
24  346 ms   247 ms   266 ms    be-3-0.ibr03.dsm05.ntwk.msn.net [104.44.17.165]
25  260 ms   276 ms   254 ms    ae140-0.icr03.dsm05.ntwk.msn.net [104.44.22.198]
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。
```

2、利用 whois 查询 tencent.com 的相关信息

Domain Information	
Domain:	tencent.com
Registrar:	MarkMonitor Inc.
Registered On:	1998-09-14
Expires On:	2030-09-12
Updated On:	2021-03-03
Status:	clientDeleteProhibited clientTransferProhibited clientUpdateProhibited serverDeleteProhibited serverTransferProhibited serverUpdateProhibited
Name Servers:	ns1.qq.com ns2.qq.com ns3.qq.com 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: 3216096_DOMAIN_COM-VRSN	
Registrar WHOIS Server: whois.markmonitor.com	
Registrar URL: http://www.markmonitor.com	
Updated Date: 2021-03-02T19:06:11-0800	
Creation Date: 1998-09-13T21:00:00-0700	
Registrar Registration Expiration Date: 2030-09-12T21:00:00-0700	
Registrar: MarkMonitor, Inc.	
Registrar IANA ID: 292	
Registrar Abuse Contact Email: abusecomplaints@markmonitor.com	
Registrar Abuse Contact Phone: +1 2083805770	
Domain Status: clientUpdateProhibited (https://www.icann.org/epp#clientUpdateProhibited)	
Domain Status: clientTransferProhibited (https://www.icann.org/epp#clientTransferProhibited)	
Domain Status: clientDeleteProhibited (https://www.icann.org/epp#clientDeleteProhibited)	
Domain Status: serverUpdateProhibited (https://www.icann.org/epp#serverUpdateProhibited)	
Domain Status: serverTransferProhibited (https://www.icann.org/epp#serverTransferProhibited)	
Domain Status: serverDeleteProhibited (https://www.icann.org/epp#serverDeleteProhibited)	
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/whois/tencent.com	
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/tencent.com	
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/tencent.com	
Name Server: ns2.qq.com	
Name Server: ns4.qq.com	
Name Server: ns1.qq.com	
Name Server: ns3.qq.com	
DNSSEC: unsigned	
URL of the ICANN WHOIS Data Problem Reporting System: http://wdprs.internic.net/	
>>> Last update of WHOIS database: 2021-03-02T19:27:18-0800 <<<	
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 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 reserves the right to modify these terms at any time.

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

MarkMonitor Domain Management(TM)
Protecting companies and consumers in a digital world.

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Contact us at +1.800.459.229
In Europe, at +44.62032062220