

Alerta de seguridad informática	8FFR-00148-001
Clase de alerta	Fraude
Tipo de incidente	Falsificación de Registros o Identidad
Nivel de riesgo	Alto
TLP	Blanco
Fecha de lanzamiento original	12 de Diciembre de 2019
Última revisión	12 de Diciembre de 2019

NOTIFICACIÓN

La información consignada en el presente informe es producto del análisis de múltiples fuentes, de terceras partes e investigación propia del equipo CSIRT. La información contenida en los informes o comunicados está afecta a actualizaciones, por lo cual se recomienda establecer una cuarentena preventiva respecto de los loC mencionados, previa evaluación de impacto en servicios productivos; una vez que sus plataformas de monitoreo no detecten actividad maliciosa, se debe evaluar la posibilidad de liberar del bloqueo a los loC consignados en el reporte respectivo, tales como servicios de hosting, de cloud o similares.

Estos casos de fraude no involucran directamente a las entidades ni al sistema bancario, sino que son técnicas de fraude indirecto, en las que en infraestructura externa a éstas se arma el mencionado fraude, para construir el engaño. Las entidades, en general, al tomar conocimiento de estos portales maliciosos articulan, dentro de sus potestades y marco legal vigente, las acciones necesarias para poder desarticularlos, pero ciertamente los usuarios también estamos llamados a estar atentos a estos intentos de engaño.

Resumen

El Equipo de Respuesta ante Incidentes de Seguridad Informática (CSIRT), ha identificado la activación de tres portales fraudulentos asociados a una IP que suplanta el sitio web oficial de **Banco de Chile**, el que podría servir para robar credenciales de usuarios de esa entidad.

Lo anterior constituye una falsificación de la marca institucional que podría afectar a usuarios, clientes y a la entidad bancaria aludida.

Indicadores de Compromisos

URL's




URL Sitio Clonado:




[https://crazygirlinflipflops\[.\]com/wp-content/www\[.\]bancochile\[.\]cl/servicio/personas/www\[.\]bancoedwards\[.\]cl/Login\[.\]htm](https://crazygirlinflipflops[.]com/wp-content/www[.]bancochile[.]cl/servicio/personas/www[.]bancoedwards[.]cl/Login[.]htm)

[https://chotanthanh\[.\]vn/documentation/www\[.\]bancochile\[.\]cl/servicio/personas/www\[.\]bancoedwards\[.\]cl/Login\[.\]htm](https://chotanthanh[.]vn/documentation/www[.]bancochile[.]cl/servicio/personas/www[.]bancoedwards[.]cl/Login[.]htm)

[https://bienhoaoto\[.\]com/wp-content/www\[.\]bancochile\[.\]cl/servicio/personas/www\[.\]bancoedwards\[.\]cl/Login\[.\]htm](https://bienhoaoto[.]com/wp-content/www[.]bancochile[.]cl/servicio/personas/www[.]bancoedwards[.]cl/Login[.]htm)

[https://bienhoaoto\[.\]com/wp-content/www\[.\]bancochile\[.\]cl/servicio/personas/www\[.\]bancoedwards\[.\]cl/Login\[.\]htm](https://bienhoaoto[.]com/wp-content/www[.]bancochile[.]cl/servicio/personas/www[.]bancoedwards[.]cl/Login[.]htm)

Domain crazygirlinflipflops.com ⓘ			
crazygirlinflipflops / com /  Subdomains			
record type	TTL	value	
A	300	150.95.114.81	
NS	86400	kara.ns.cloudflare.com	 Zones on DNS server 173.245.58.123
NS	86400	kip.ns.cloudflare.com	 Zones on DNS server 173.245.59.128
TXT	300	ca3-d6aaa028b8664f54a6deb912a4ec1cb6	
SOA	3600	Mname	kara.ns.cloudflare.com
		Rname	dns.cloudflare.com
		Serial number	2031535776
		Refresh	10000
		Retry	2400
		Expire	604800
		Minimum TTL	3600

Domain chotanthanh.vn ⓘ			
chotanthanh / vn /  Subdomains			
record type	TTL	value	
A	300	150.95.114.81	
NS	86400	kara.ns.cloudflare.com	 Zones on DNS server 173.245.58.123
NS	86400	kip.ns.cloudflare.com	 Zones on DNS server 173.245.59.128
TXT	300	ca3-4d1e1ae945cb453db638a9776786a4d3	
SOA	3600	Mname	kara.ns.cloudflare.com
		Rname	dns.cloudflare.com
		Serial number	2031154430
		Refresh	10000
		Retry	2400
		Expire	604800
		Minimum TTL	3600

Domain bienhoauto.com ⓘ																	
bienhoauto / com / Subdomains																	
record type	TTL	value															
A	300	150.95.114.81															
NS	86400	kara.ns.cloudflare.com	Zones on DNS server 173.245.58.123														
NS	86400	kip.ns.cloudflare.com	Zones on DNS server 173.245.59.128														
MX	300	10 mail.bienhoauto.com 150.95.114.81															
SOA	3600	<table border="1"> <tr><td>Mname</td><td>kara.ns.cloudflare.com</td></tr> <tr><td>Rname</td><td>dns.cloudflare.com</td></tr> <tr><td>Serial number</td><td>2031152543</td></tr> <tr><td>Refresh</td><td>10000</td></tr> <tr><td>Retry</td><td>2400</td></tr> <tr><td>Expire</td><td>604800</td></tr> <tr><td>Minimum TTL</td><td>3600</td></tr> </table>		Mname	kara.ns.cloudflare.com	Rname	dns.cloudflare.com	Serial number	2031152543	Refresh	10000	Retry	2400	Expire	604800	Minimum TTL	3600
Mname	kara.ns.cloudflare.com																
Rname	dns.cloudflare.com																
Serial number	2031152543																
Refresh	10000																
Retry	2400																
Expire	604800																
Minimum TTL	3600																

Ilustración 1 Dominio donde se Aloja Url del Banco de Chile, Falso y DNS que utiliza

Certificados

Criteria Identity = 'crazygirlinflipflops.com'; Exclude expired certificates						
Certificates	crt.sh ID	Logged At	Not Before	Not After	Issuer Name	
	2145718447	2019-11-23	2019-11-23	2020-02-21	C=US, O=Let's Encrypt, CN=Let's Encrypt Authority X3	
	2145718357	2019-11-23	2019-11-23	2020-02-21	C=US, O=Let's Encrypt, CN=Let's Encrypt Authority X3	
	1920524394	2019-09-21	2019-09-21	2019-12-20	C=US, O=Let's Encrypt, CN=Let's Encrypt Authority X3	
	1911081693	2019-09-21	2019-09-21	2019-12-20	C=US, O=Let's Encrypt, CN=Let's Encrypt Authority X3	
	1479474044	2019-05-17	2019-05-17	2020-05-17	C=US, ST=CA, L=San Francisco, O="CloudFlare, Inc.", CN=CloudFlare Inc ECC CA-2	

Criteria Identity = 'chotanthanh.vn'; Exclude expired certificates						
Certificates	crt.sh ID	Logged At	Not Before	Not After	Issuer Name	
	2016937299	2019-10-19	2019-10-19	2020-01-17	C=US, O=Let's Encrypt, CN=Let's Encrypt Authority X3	
	2016936130	2019-10-19	2019-10-19	2020-01-17	C=US, O=Let's Encrypt, CN=Let's Encrypt Authority X3	
	1113828203	2019-01-15	2019-01-12	2020-01-12	C=US, ST=CA, L=San Francisco, O="CloudFlare, Inc.", CN=CloudFlare Inc ECC CA-2	
	1103443532	2019-01-12	2019-01-12	2020-01-12	C=US, ST=CA, L=San Francisco, O="CloudFlare, Inc.", CN=CloudFlare Inc ECC CA-2	

Certificates		Criteria			Identity = 'bienhoato.com'; Exclude expired certificates
crt.sh ID	Logged At	Not Before	Not After	Issuer Name	
1995283700	2019-10-12	2019-10-12	2020-01-10	C=US, O=Let's Encrypt, CN=Let's Encrypt Authority X3	
1989232474	2019-10-12	2019-10-12	2020-01-10	C=US, O=Let's Encrypt, CN=Let's Encrypt Authority X3	
1901283825	2019-09-18	2019-09-18	2020-03-26	C=GB, ST=Greater Manchester, L=Salford, O=COMODO CA Limited, CN=COMODO ECC Domain Validation Secure Server CA 2	
1901283724	2019-09-18	2019-09-18	2020-03-26	C=GB, ST=Greater Manchester, L=Salford, O=COMODO CA Limited, CN=COMODO ECC Domain Validation Secure Server CA 2	
1837019577	2019-09-02	2019-09-02	2020-03-10	C=GB, ST=Greater Manchester, L=Salford, O=COMODO CA Limited, CN=COMODO ECC Domain Validation Secure Server CA 2	
1837019623	2019-09-02	2019-09-02	2020-03-10	C=GB, ST=Greater Manchester, L=Salford, O=COMODO CA Limited, CN=COMODO ECC Domain Validation Secure Server CA 2	
1826566953	2019-08-30	2019-08-30	2020-03-07	C=GB, ST=Greater Manchester, L=Salford, O=COMODO CA Limited, CN=COMODO ECC Domain Validation Secure Server CA 2	
1824641804	2019-08-29	2019-08-29	2020-03-06	C=GB, ST=Greater Manchester, L=Salford, O=COMODO CA Limited, CN=COMODO ECC Domain Validation Secure Server CA 2	
1824641822	2019-08-29	2019-08-29	2020-03-06	C=GB, ST=Greater Manchester, L=Salford, O=COMODO CA Limited, CN=COMODO ECC Domain Validation Secure Server CA 2	
1820781237	2019-08-28	2019-08-28	2020-03-05	C=GB, ST=Greater Manchester, L=Salford, O=COMODO CA Limited, CN=COMODO ECC Domain Validation Secure Server CA 2	
1820787957	2019-08-28	2019-08-28	2020-03-05	C=GB, ST=Greater Manchester, L=Salford, O=COMODO CA Limited, CN=COMODO ECC Domain Validation Secure Server CA 2	
1818532548	2019-08-28	2019-08-28	2020-03-05	C=GB, ST=Greater Manchester, L=Salford, O=COMODO CA Limited, CN=COMODO ECC Domain Validation Secure Server CA 2	
1818530417	2019-08-28	2019-08-28	2020-03-05	C=GB, ST=Greater Manchester, L=Salford, O=COMODO CA Limited, CN=COMODO ECC Domain Validation Secure Server CA 2	
1818432748	2019-08-28	2019-08-28	2020-03-05	C=GB, ST=Greater Manchester, L=Salford, O=COMODO CA Limited, CN=COMODO ECC Domain Validation Secure Server CA 2	
1818430983	2019-08-28	2019-08-28	2020-03-05	C=GB, ST=Greater Manchester, L=Salford, O=COMODO CA Limited, CN=COMODO ECC Domain Validation Secure Server CA 2	
1817126586	2019-08-27	2019-08-27	2020-03-04	C=GB, ST=Greater Manchester, L=Salford, O=COMODO CA Limited, CN=COMODO ECC Domain Validation Secure Server CA 2	
1817126977	2019-08-27	2019-08-27	2020-03-04	C=GB, ST=Greater Manchester, L=Salford, O=COMODO CA Limited, CN=COMODO ECC Domain Validation Secure Server CA 2	
1654351159	2019-07-10	2019-07-10	2020-01-16	C=GB, ST=Greater Manchester, L=Salford, O=COMODO CA Limited, CN=COMODO ECC Domain Validation Secure Server CA 2	
1654348948	2019-07-10	2019-07-10	2020-01-16	C=GB, ST=Greater Manchester, L=Salford, O=COMODO CA Limited, CN=COMODO ECC Domain Validation Secure Server CA 2	
1653997105	2019-07-10	2019-07-10	2020-01-16	C=GB, ST=Greater Manchester, L=Salford, O=COMODO CA Limited, CN=COMODO ECC Domain Validation Secure Server CA 2	
1653998941	2019-07-10	2019-07-10	2020-01-16	C=GB, ST=Greater Manchester, L=Salford, O=COMODO CA Limited, CN=COMODO ECC Domain Validation Secure Server CA 2	
1629393398	2019-07-01	2019-07-01	2020-01-07	C=GB, ST=Greater Manchester, L=Salford, O=COMODO CA Limited, CN=COMODO ECC Domain Validation Secure Server CA 2	
1629392979	2019-07-01	2019-07-01	2020-01-07	C=GB, ST=Greater Manchester, L=Salford, O=COMODO CA Limited, CN=COMODO ECC Domain Validation Secure Server CA 2	
1595547232	2019-06-20	2019-06-20	2019-12-27	C=GB, ST=Greater Manchester, L=Salford, O=COMODO CA Limited, CN=COMODO ECC Domain Validation Secure Server CA 2	
1595546945	2019-06-20	2019-06-20	2019-12-27	C=GB, ST=Greater Manchester, L=Salford, O=COMODO CA Limited, CN=COMODO ECC Domain Validation Secure Server CA 2	
1581588992	2019-06-16	2019-06-16	2019-12-23	C=GB, ST=Greater Manchester, L=Salford, O=COMODO CA Limited, CN=COMODO ECC Domain Validation Secure Server CA 2	
1581586780	2019-06-16	2019-06-16	2019-12-23	C=GB, ST=Greater Manchester, L=Salford, O=COMODO CA Limited, CN=COMODO ECC Domain Validation Secure Server CA 2	
1571991182	2019-06-13	2019-06-13	2019-12-20	C=GB, ST=Greater Manchester, L=Salford, O=COMODO CA Limited, CN=COMODO ECC Domain Validation Secure Server CA 2	
1571990987	2019-06-13	2019-06-13	2019-12-20	C=GB, ST=Greater Manchester, L=Salford, O=COMODO CA Limited, CN=COMODO ECC Domain Validation Secure Server CA 2	

Ilustración 2 Certificado Utilizado en Url del sitio Falso del Banco de Chile.

IP

150.95.114.81

Domain crazygirlinflipflops.com is located on IP address << 150.95.114.81 >>	
Block start	150.95.112.0
End of block	150.95.127.255
Block size	4096 Domains in block
Block name	RUNSYSTEM-VN
AS number	131392
Parent block	150.0.0.0 - 150.255.255.255
Organization	GMO-Z.com Runsystem Joint Stock Company 6th Floor, Ocean Park Tower, No 1 Dao Duy Anh Street, Dong Da disstrict, Ha Noi City
City	Hanoi
Region/State	Ha Noi
Country	VN , Viet Nam
Reg. date	1997-03-31
Host name	v150-95-114-81.a015.g.han1.static.cnode.io
Domains	1 crazygirlinflipflops.com

Domain chotanthanh.vn is located on IP address << 150.95.114.81 >>	
Block start	150.95.112.0
End of block	150.95.127.255
Block size	4096 Domains in block
Block name	RUNSYSTEM-VN
AS number	131392
Parent block	150.0.0.0 - 150.255.255.255
Organization	GMO-Z.com Runsystem Joint Stock Company 6th Floor, Ocean Park Tower, No 1 Dao Duy Anh Street, Dong Da disstrict, Ha Noi City
City	Hanoi
Region/State	Ha Noi
Country	VN , Viet Nam
Reg. date	1997-03-31
Host name	v150-95-114-81.a015.g.han1.static.cnode.io
Domain count	>= 3 Servers around
Domains	1 bienhoato.com 2 chotanthanh.vn 3 crazygirlinflipflops.com

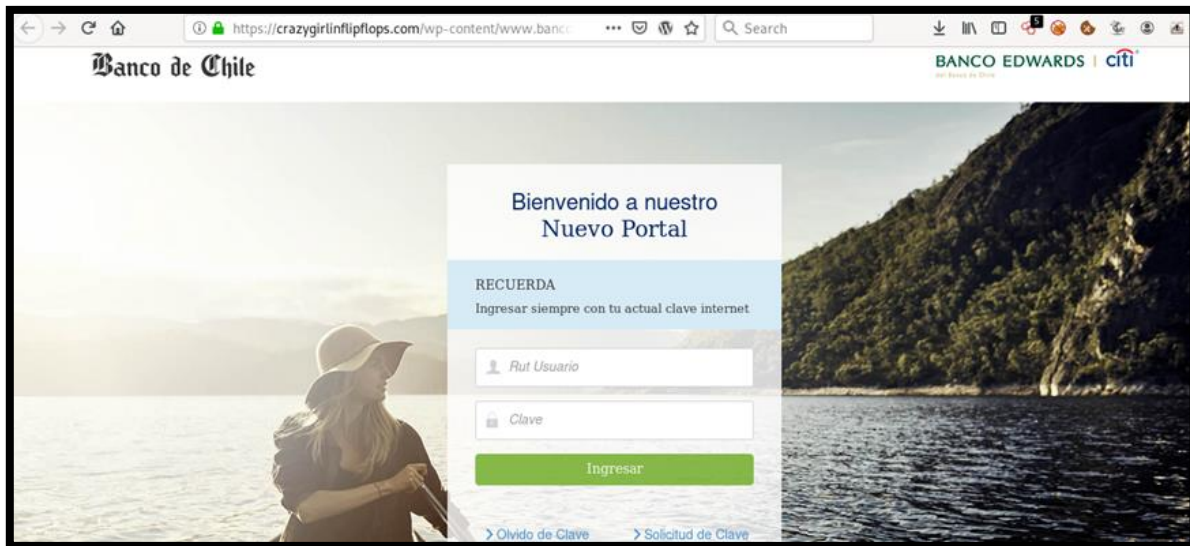
Domain bienhoato.com is located on IP address << 150.95.114.81 >>	
Block start	150.95.112.0
End of block	150.95.127.255
Block size	4096 Domains in block
Block name	RUNSYSTEM-VN
AS number	131392
Parent block	150.0.0.0 - 150.255.255.255
Organization	GMO-Z.com Runsystem Joint Stock Company 6th Floor, Ocean Park Tower, No. 1 Dao Duy Anh Street, Dong Da district, Ha Noi City
City	Hanoi
Region/State	Ha Noi
Country	 VN , Viet Nam
Reg. date	1997-03-31
Host name	v150-95-114-81.a015.g.han1.static.cnode.io
Domain count	>= 2 Servers around
Domains	1  bienhoato.com 2  crazygirlinflipflops.com

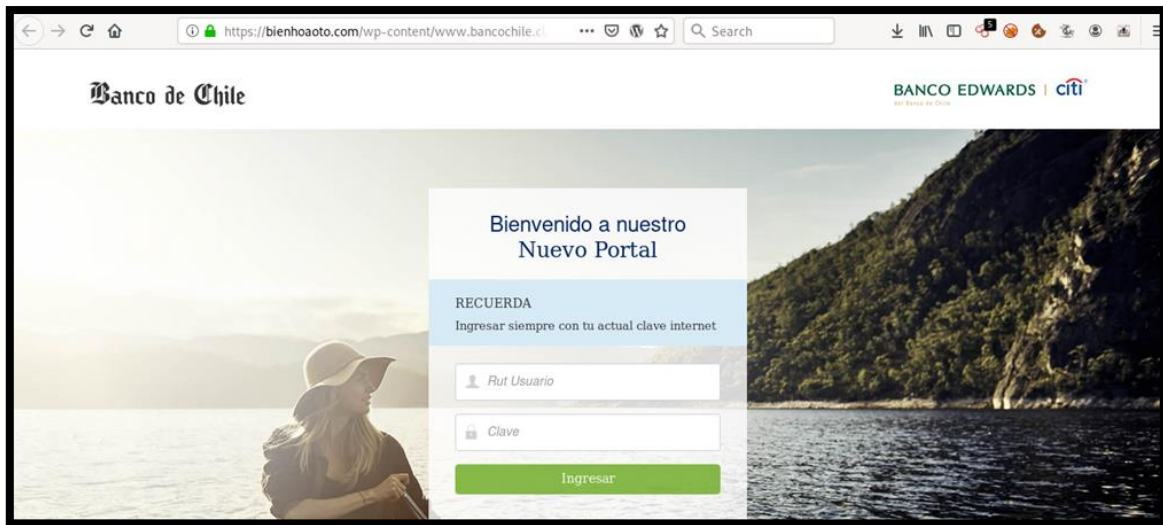
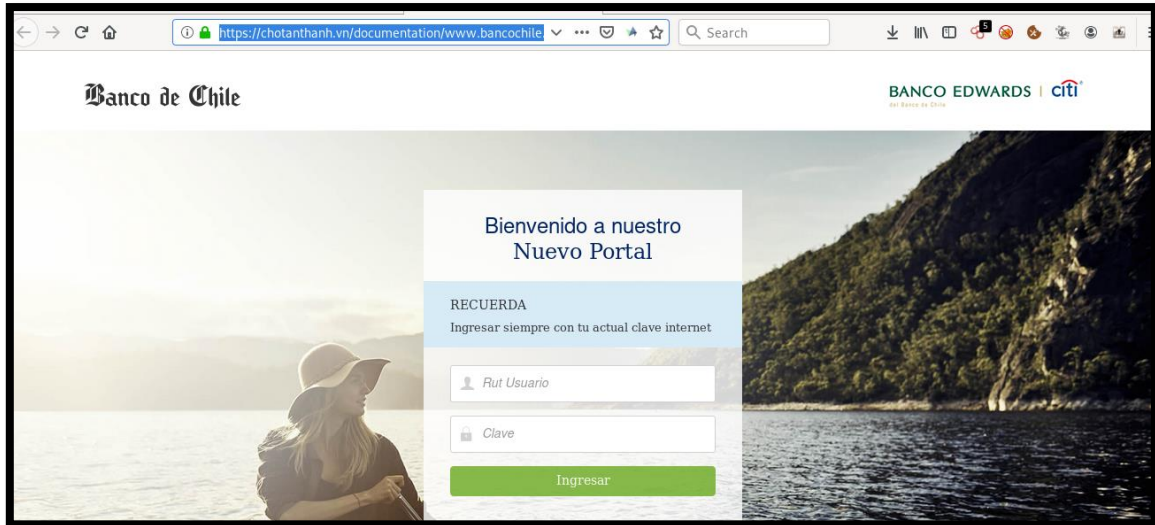
Ilustración 3 Ip de Origen donde se aloja Sitio Falso del Banco de Chile

Localización

Hanoi, Ha Noi, Viet Nam

Imagen del sitio





Whois

```
whois -h whois.verisign-grs.com crazygirlinflipflops.com
Domain Name: CRAZYGIRLINFLIPFLOPS.COM
Registry Domain ID: 2292633545_DOMAIN_COM-VRSN
Registrar WHOIS Server: whois.namecheap.com
Registrar URL: http://www.namecheap.com
Updated Date: 2019-07-03T13:43:36Z
Creation Date: 2018-08-01T11:53:08Z
Registry Expiry Date: 2020-08-01T11:53:08Z
Registrar: NameCheap, Inc.
Registrar IANA ID: 1068
Registrar Abuse Contact Email: abuse@namecheap.com
Registrar Abuse Contact Phone: +1.6613102107
Domain Status: clientTransferProhibited https://icann.org/epp#clientTransferProhibited
Name Server: KARA.NS.CLOUDFLARE.COM
Name Server: KIP.NS.CLOUDFLARE.COM
DNSSEC: unsigned
URL of the ICANN Whois Inaccuracy Complaint Form: https://www.icann.org/wicf/
>>> Last update of whois database: 2019-12-10T18:59:06Z <<<

For more information on Whois status codes, please visit https://icann.org/epp

NOTICE: The expiration date displayed in this record is the date the
registrar's sponsorship of the domain name registration in the registry is
currently set to expire. This date does not necessarily reflect the expiration
date of the domain name registrant's agreement with the sponsoring
registrar. Users may consult the sponsoring registrar's Whois database to
view the registrar's reported date of expiration for this registration.

TERMS OF USE: You are not authorized to access or query our Whois
database through the use of electronic processes that are high-volume and
automated except as reasonably necessary to register domain names or
modify existing registrations; the Data in VeriSign Global Registry
Services' ("VeriSign") Whois database is provided by VeriSign for
information purposes only, and to assist persons in obtaining information
about or related to a domain name registration record. VeriSign does not
guarantee its accuracy. By submitting a Whois query, you agree to abide
by the following terms of use: You agree that you may 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 of mass
unsolicited, commercial advertising or solicitations via e-mail, telephone,
or facsimile; or (2) enable high volume, automated, electronic processes
that apply to VeriSign (or its computer systems). The compilation,
repackaging, dissemination or other use of this Data is expressly
prohibited without the prior written consent of VeriSign. You agree not to
use electronic processes that are automated and high-volume to access or
query the Whois database except as reasonably necessary to register
domain names or modify existing registrations. VeriSign reserves the right
to restrict your access to the Whois database in its sole discretion to ensure
operational stability. VeriSign may restrict or terminate your access to the
Whois database for failure to abide by these terms of use. VeriSign
reserves the right to modify these terms at any time.

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

```
whois -i chotanhannh.vn
% IANA WHOIS server
% for more information on IANA, visit http://www.iana.org
% This query returned 1 object

domain:          VN

organisation:    Viet Nam Internet Network Information Center (VNNIC)
address:         Ministry of Information and Communications of Socialist Republic of Viet Nam
address:         18 Nguyen Du
address:         Hanoi 100000
address:         Viet Nam

contact:         administrative
name:            Tran Minh Tan
organisation:    Vietnam Internet Network Information Center (VNNIC)
address:         18 Nguyen Du
address:         Hanoi 10000
address:         Viet Nam
phone:           +84 4 35564944 ext 512
fax-no:          +84 4 37821462
e-mail:          tantm@vnnic.vn

contact:         technical
name:            Nguyen Hong Thang
organisation:    Vietnam Internet Network Information Center (VNNIC)
address:         18 Nguyen Du
address:         Hanoi 10000
address:         Viet Nam
phone:           +84 4 35564944 ext 301
fax-no:          +84 4 37821462
e-mail:          nhthang@vnnic.net.vn

nserver:         A.DNS-SERVERS.VN 194.0.1.18 2001:678:4:0:0:0:12
nserver:         B.DNS-SERVERS.VN 2001:dc8:1:2:0:0:0:105 203.119.73.105
nserver:         C.DNS-SERVERS.VN 2001:dc8:c000:7:0:0:0:105 203.119.38.105
nserver:         D.DNS-SERVERS.VN 203.119.44.105
nserver:         E.DNS-SERVERS.VN 2001:dc8:1000:2:0:0:0:105 203.119.60.105
nserver:         F.DNS-SERVERS.VN 2001:dc8:d000:2:0:0:0:105 203.119.68.105
nserver:         G.DNS-SERVERS.VN 2001:500:14:6115:ad:0:0:1 204.61.216.115
ds-rdata:        3260 8 2 5A58C19AF266077FFE16C2668812796FA8193661AF569DBCEB177F911B5E6167
ds-rdata:        3260 8 1 913C652B4006DEAC045B945F4FFCBC1065645421

status:          ACTIVE
remarks:         Registration information: http://www.vnnic.net.vn

created:         1994-04-14
changed:         2019-05-12
source:          IANA
```



```
! * $ whois -i bienhoaoto.com
% IANA WHOIS server
% for more information on IANA, visit http://www.iana.org
% This query returned 1 object

refer:      whois.verisign-grs.com

domain:     COM

organisation: VeriSign Global Registry Services
address:    12061 Bluemont Way
address:    Reston Virginia 20190
address:    United States

contact:    administrative
name:       Registry Customer Service
organisation: VeriSign Global Registry Services
address:    12061 Bluemont Way
address:    Reston Virginia 20190
address:    United States
phone:      +1 703 925-6999
fax-no:     +1 703 948 3978
e-mail:     info@verisign-grs.com

contact:    technical
name:       Registry Customer Service
organisation: VeriSign Global Registry Services
address:    12061 Bluemont Way
address:    Reston Virginia 20190
address:    United States
phone:      +1 703 925-6999
fax-no:     +1 703 948 3978
e-mail:     info@verisign-grs.com

nserver:    A.GTLD-SERVERS.NET 192.5.6.30 2001:503:a83e:0:0:0:2:30
nserver:    B.GTLD-SERVERS.NET 192.33.14.30 2001:503:231d:0:0:0:2:30
nserver:    C.GTLD-SERVERS.NET 192.26.92.30 2001:503:83eb:0:0:0:0:30
nserver:    D.GTLD-SERVERS.NET 192.31.80.30 2001:500:856e:0:0:0:0:30
nserver:    E.GTLD-SERVERS.NET 192.12.94.30 2001:502:1ca1:0:0:0:0:30
nserver:    F.GTLD-SERVERS.NET 192.35.51.30 2001:503:d414:0:0:0:0:30
nserver:    G.GTLD-SERVERS.NET 192.42.93.30 2001:503:eea3:0:0:0:0:30
nserver:    H.GTLD-SERVERS.NET 192.54.112.30 2001:502:8cc:0:0:0:0:30
nserver:    I.GTLD-SERVERS.NET 192.43.172.30 2001:503:39c1:0:0:0:0:30
nserver:    J.GTLD-SERVERS.NET 192.48.79.30 2001:502:7094:0:0:0:0:30
nserver:    K.GTLD-SERVERS.NET 192.52.178.30 2001:503:d2d:0:0:0:0:30
nserver:    L.GTLD-SERVERS.NET 192.41.162.30 2001:500:d937:0:0:0:0:30
nserver:    M.GTLD-SERVERS.NET 192.55.83.30 2001:501:b1f9:0:0:0:0:30
ds-rdata:   30909 8 2 E2D3C916F6DEEAC73294E8268FB5885044A833FC5459588F4A9184CFC41A5766

whois:      whois.verisign-grs.com

status:     ACTIVE
remarks:    Registration information: http://www.verisigninc.com

created:    1985-01-01
changed:    2017-10-05
source:     IANA

Domain Name: BIENHOAOTO.COM
Registry Domain ID: 2277079648_DOMAIN_COM_VRSN
Registrar WHOIS Server: whois.discount-domain.com
Registrar URL: http://gmo.jp
Updated Date: 2019-06-19T01:43:38Z
```

Recomendaciones

- Evitar acceder al sitio anteriormente indicado e informar a los usuarios sobre su existencia, para evitar que se conviertan en víctimas del fraude.
- Ser precavidos frente a este tipo de páginas fraudulentas.
- Bloquear en los proxy o sistemas de control de contenido, hacia la URL maliciosa
- Evaluar el bloqueo preventivo de los indicadores de compromisos
- Mantener actualizadas todas las plataformas de tecnologías y de detección de amenazas
- Revisar los controles de seguridad de los AntiSpam y SandBoxing.