



13 OCT 2015 NEWS

# Web Owners Urged to Upgrade From Insecure SHA-1 Algorithm



Phil Muncaster

UK / EMEA News Reporter, Infosecurity Magazine

[Email Phil](#)

[Follow @philmuncaster](#)

Security experts are urging website owners to ensure their SSL certificates are signed with the SHA-2 algorithm, after discovering a new way to crack the old SHA-1 version.

Advances in computing technology have made it increasingly cost effective for attackers to target hashing algorithm SHA-1, which is used to sign around a third of the SSL certs used to secure websites.

That's why web browsers will no longer accept these certificates after 1 January 2017.

However, a new team of researchers has estimated it would cost between \$75,000 and \$120,000 to rent public cloud services to launch such an attack – still expensive but within the reach of major cybercrime gangs.

There are also mutterings within the Certificate Authority industry that the January 2017 deadline might be extended.

Now researchers from Singapore's Nanyang Technological University (NTU), Centrum Wiskunde and Informatica in the Netherlands and France's NTU and Inria have described a way to simplify an "identical-prefix" attack on SHA-1.

It would not allow attackers to generate fake SSL certificates, but the research should be seen as yet another sign that the legacy hashing algorithm has had its day, according to [IDG](#).

Kevin Bocek, vice president of security strategy & threat intelligence at Venafi, argued that the widespread use of a flawed algorithm is sending a clear message to cybercriminals: "feel free to mount more web attacks on us because we're too lazy to upgrade to SHA-2."

He claimed Venafi found over 1.5 million certificates using SHA-1 which were issued after NIST had deprecated its usage.

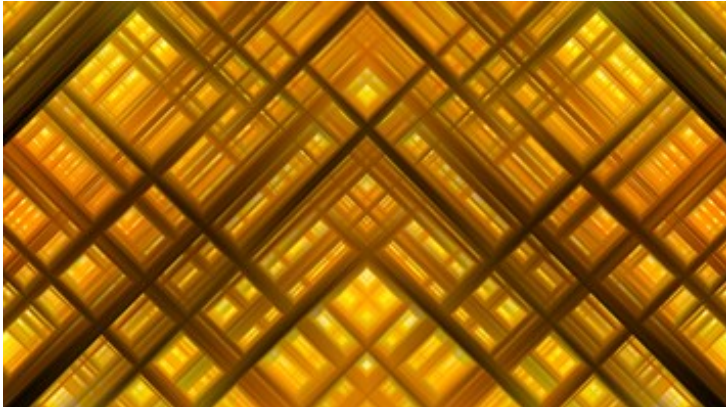
"If we don't start taking the security of digital certificates and cryptographic keys seriously, we'll continue living in a world without trust – a world without an immune system – and a world where a cryptoapocalypse will inevitably happen," he argued.

"We urge the industry to consider shifting this deadline up and enterprises should not wait any longer to migrate to SHA-2."

IT security teams should locate SHA-1 certificates immediately, automate the transition process and report on their progress before the 2017 deadline, Bocek added.



## Why Not Watch?



5 FEB 2015

**Encryption Under Attack: Government vs Privacy**



21 JAN 2016

**Don't Be Blind On Visibility**



7 JAN 2016

**The 'Dark' Web Inside Your Enterprise – Shining a Light on the Hazards of Encrypted Traffic**



2 APR 2015

**Browsers, Certificates and Trust: What's Changing and What You Need to Know**

## Related to This Story

---

UK Online Banking Log-On Pages Deeply Vulnerable

---

Google Demands Changes After More Rogue Symantec SSL Certs Found

---

Critical BERserk Flaw Opens Door to SSL Spoofing and MiTM Attacks

---

Mobile App Research Shows Major Flaws Persist

---

Google Preps New Service after Global Email Encryption Warning

# What's Hot on Infosecurity Magazine?

Read

Shared

Watched

Editor's Choice

1

28 JAN 2016

NEWS

Panda Security Spotted Over 80 Million New Malware Samples in 2015

2

28 JAN 2016

NEWS

Employee Retention is Critical to Solving the Security Skills Shortage

3

28 JAN 2016

NEWS

Large-Scale Hacks Cause 98% of Leaked Healthcare Records

4

28 JAN 2016

NEWS

DDoS Attacks Hit Record 500 Gbps in 2015

5

20 FEB 2013

MAGAZINE FEATURE

The Dark Side of Cryptography: Kleptography in Black-Box Implementations

6

28 JAN 2016

NEWS

Wendy's Investigates Possible Data Breach

## SPRING VIRTUAL CONFERENCE

Earn up to 10 CPE Credits

15<sup>th</sup> - 16<sup>th</sup>  
March 2016

Register Now



### The Magazine

[About Infosecurity](#)

[Subscription](#)

[Meet the Team](#)

[Contact Us](#)

### Advertisers

[Media Pack](#)

**infosecurity**  
CONNECTING THE INDUSTRY IN PERSON, IN PRINT, ONLINE

#### Our website uses cookies

Cookies enable us to provide the best experience possible and help us understand how visitors use our website. By browsing Infosecurity Magazine, you agree to our use of cookies.

Okay, I understand

[Learn more](#)

Copyright © 2016 Reed Exhibitions Ltd.

[Terms and Conditions](#)

[Privacy Policy](#)

[Use of Cookies](#)

[Sitemap](#)

Reed Exhibitions