

# THE DOMAIN NAME INDUSTRY BRIEF

**VOLUME 12 – ISSUE 3 – SEPTEMBER 2015**

## **THE VERISIGN DOMAIN REPORT**

AS A GLOBAL LEADER IN DOMAIN NAMES AND INTERNET SECURITY, VERISIGN REVIEWS THE STATE OF THE DOMAIN NAME INDUSTRY THROUGH A VARIETY OF STATISTICAL AND ANALYTICAL RESEARCH. VERISIGN PROVIDES THIS BRIEFING TO HIGHLIGHT IMPORTANT TRENDS IN DOMAIN NAME REGISTRATIONS, INCLUDING KEY PERFORMANCE INDICATORS AND GROWTH OPPORTUNITIES, TO INDUSTRY ANALYSTS, MEDIA AND BUSINESSES.



**VERISIGN<sup>®</sup>**



## EXECUTIVE SUMMARY

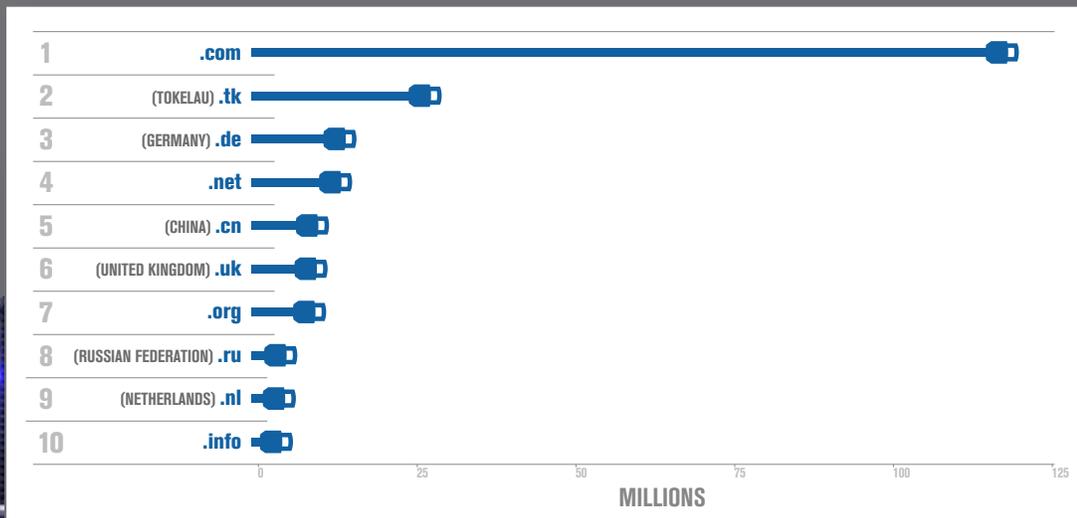
The second quarter of 2015 closed with a base of 296 million domain name registrations across all top-level domains (TLDs), an increase of 2.2 million domain names, or .8 percent increase compared to the first quarter of 2015. Registrations have grown by 16.4 million, or 5.9 percent, year over year.<sup>1</sup>

Total country-code TLD (ccTLD) registrations were 138 million domain names, a .8 percent increase quarter over quarter, and an 8.2 percent increase year over year.

The .com and .net TLDs experienced aggregate growth, reaching a combined total of approximately 133.5 million domain names in the domain name base in the second quarter of 2015. This represents a 3.1 percent increase year over year. As of June 30, 2015, the base of registered names in .com equaled 118.5 million names, while .net equaled 15 million names.<sup>2</sup>

## LARGEST TLDs BY ZONE SIZE

Source: Zooknic, Q2 2015; Verisign, Q2 2015; Centralized Zone Data Service, Q2 2015



New .com and .net registrations totaled 8.7 million during the second quarter of 2015. In the second quarter of 2014, new .com and .net registrations totaled 8.5 million.

The largest TLDs in order by zone size were .com, .tk, .de, .net, .cn, .uk, .org, .ru, .nl and .info.<sup>3</sup> The order of the top TLDs in terms of zone size did not change from the first quarter of 2015.

The average aftermarket sale price for the top 10 reported .com domain names sold in the aftermarket in Q2 2015, as reported by DNJournal, was

**\$192,083**  
USD<sup>4</sup>



Growth of .com and .net domains redirecting to popular social media and e-commerce sites compared to Q1 2015:<sup>5</sup>

FACEBOOK  
**+13%**

LINKEDIN  
**+16%**

TUMBLR  
**+7%**

ETSY  
**+11%**



<sup>1</sup> The generic top-level domain (gTLD) and ccTLD data cited in this report are estimates as of the time this report was developed, and is subject to change as more complete data is received. Total includes ccTLD Internationalized Domain Names.  
<sup>2</sup> The domain name base is the active zone plus the number of domain names that are registered but not configured for use in the respective Top-Level Domain zone file plus the number of domain names that are in a client or server hold status.  
<sup>3</sup> tk is a free ccTLD that provides free domain names to individuals and businesses. Revenue is generated by monetizing expired domain names. Domain names no longer in use by the registrant or expired are taken back by the registry and the residual traffic is sold to advertising networks. As such, there are no deleted .tk domain names.  
<http://www.businesswire.com/news/home/20131216006048/en/Freenom-Closes-3M-Series-Funding#UxeUGNJDv9s>  
<sup>4</sup> DN Journal (accessed 8/5/2015) <http://www.dnjournal.com/ytd-sales-charts.htm>  
<sup>5</sup> Source: VeriSign, Inc. data

## Largest ccTLDs by Zone Size

Source: Zooknic, Q2 2015

For further information on the Domain Name Industry Brief methodology, please refer to the last page of this report.

Total ccTLD registrations were approximately 138 million in the second quarter of 2015, with the addition of 1 million domain names, or a .8 percent increase compared to the first quarter of 2015. This is an increase of approximately 9.1 million domain names, or 7.1 percent, year over year. Without including .tk, ccTLD quarter-over-quarter growth was 1.0 percent and year-over-year growth was 4.8 percent.



The top 10 ccTLDs, as of June 30, 2015, were .tk (Tokelau), .de (Germany), .cn (China), .uk (United Kingdom), .ru (Russian Federation), .nl (Netherlands), .eu (European Union), .br (Brazil), .au (Australia) and .fr (France).

As of June 30, 2015, there were 288 global ccTLD extensions delegated in the root, including Internationalized Domain Names (IDN), with the top 10 ccTLDs composing 66.7 percent of all ccTLD registrations.

## SIDEBAR: TOP 10 TRENDING KEYWORDS IN .COM AND .NET: Q2 2015

Here are the top 10 trending keywords in .com and .net domain name registrations for the second quarter of 2015.

Verisign publishes a monthly blog post highlighting domain registration keyword trends from the previous month. Each list is developed by examining keyword registration growth relative to the preceding month, such that those keywords with the highest percentage of registration growth are being reported on. This methodology was used in the chart to the right, but is representative of the preceding quarter.

This method is intended to highlight the new and changing keywords seen in .com and .net domain name registrations. By evaluating the keywords with the largest percentage shift, the top 10 that have seen a significant shift in end user interest quarter over quarter can be identified.

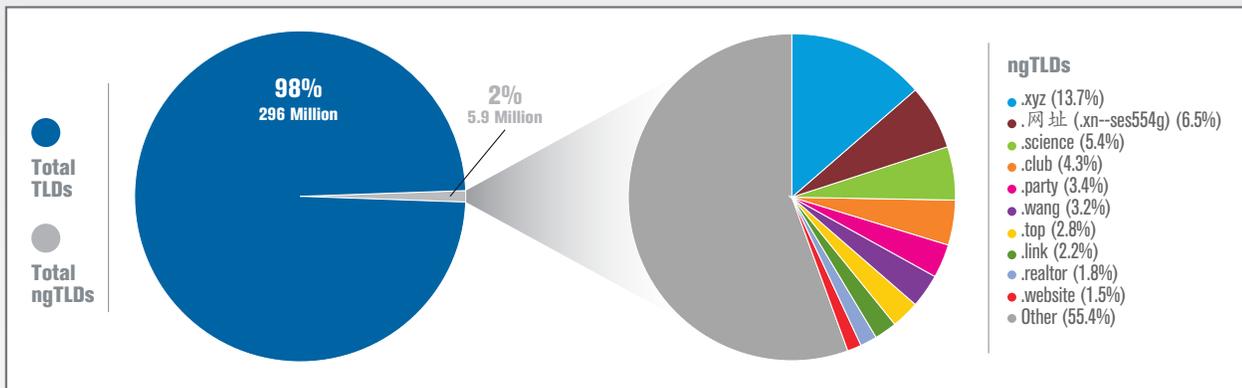
Rank	.COM	.NET
1	used	shirt
2	degree	marijuana
3	eating	manual
4	Hillary	locksmith
5	Hyundai	moving
6	inbox	icon
7	preowned	fused
8	bundle	six
9	Kia	lodge
10	straight	flag



## New gTLDs as Percentage of Total TLDs

Source: Centralized Zone Data Service, Q2 2015 and Zooknic, Q2 2015

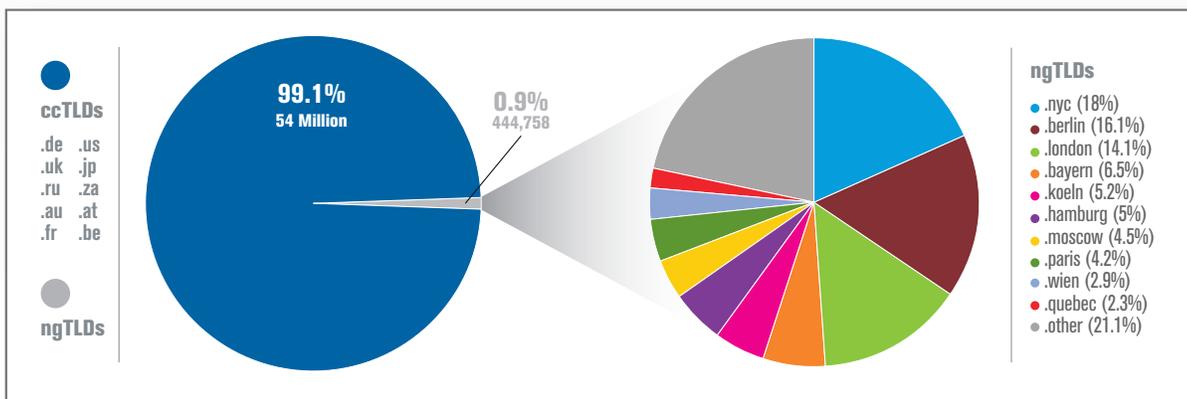
As of June 30, 2015, new gTLD (ngTLD) registrations totaled 5.86 million, which represents 2 percent of total domain name registrations. The top 10 ngTLDs represented 44.6 percent of all ngTLD domain name registrations. The following charts show ngTLD domain name registrations as a percentage of overall TLD domain name registrations, and also the top 10 ngTLDs as a percentage of all ngTLD domain name registrations.



## Geographical New gTLDs as Percentage of Total Comparable Geographical gTLDs

Source: Centralized Zone Data Service, Q2 2015 and Zooknic, Q2 2015

Among the geographical ngTLDs that have been delegated, 28 have had more than 1,000 registrations since entering general availability (GA), as of the end of the second quarter of 2015. The charts below summarize geographical ngTLD registrations as of Q2 2015, as a percentage of total geographical gTLD registrations. Geographic gTLDs include ccTLDs with one or more related geographical ngTLD having more than 1,000 registrations at the end of Q2, and their related geographical ngTLDs. In addition, the second graph highlights the top 10 geographical ngTLDs as a percentage of all geographical ngTLD registrations.



## DNS QUERY LOAD

During the second quarter of 2015, Verisign's average daily Domain Name System (DNS) query load was 111 billion across all TLDs operated by Verisign, with a peak of 182 billion. Quarter over quarter, the daily average query load decreased 7.1 percent and the peak increased by 10.2 percent. Year over year, the daily average query load increased by 16.6 percent, and the peak decreased by 10.8 percent.

**FEATURED ARTICLE**

**USING DANE FOR AUTHENTICATION OF INTERNET SERVICES**

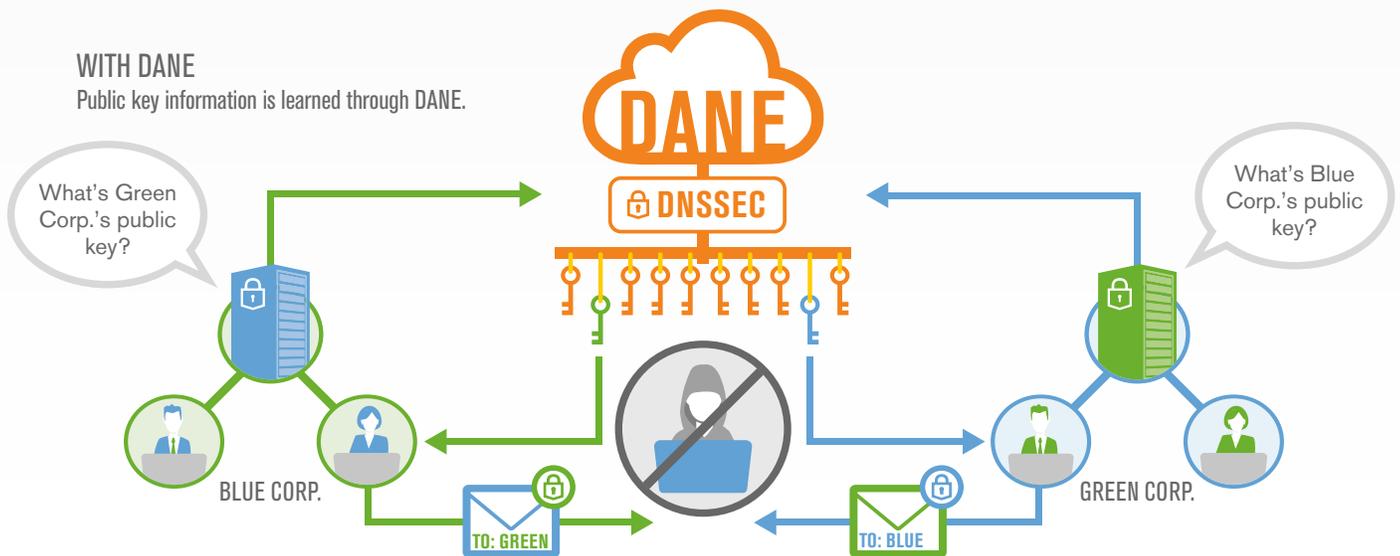
For many years, numerous cryptographically enhanced protocols have existed. Standards and suites like Secure/Multipurpose Internet Mail Extensions (S/MIME), Transport Layer Security (TLS), IP Security (IPSec), Open Pretty Good Privacy (OpenPGP) and many others have offered a range of protections and have been implemented by a wealth of code. Based on these protections, many assume that ecommerce transactions, point-to-point phone calls, and Virtual Private Networks (VPN) that let us remotely connect to our internal enterprise networks, etc. are all secure. However, the reality is that Internet security protocols have all excluded a very important step from their security analyses; secure key learning.

Before data can be encrypted or signatures verified, cryptographic keys need to be looked up (or learned securely). Until recently, the security protections from these protocols have been prefaced with techniques like Out of Band (OOB) key learning (learning keys in an unspecified way) or Trust on First Use (ToFU) key learning (just accepting whatever keys are found first). Each protocol performs these techniques separately and potentially in unique ways because the

protocols used for protections have not formally specified a standardized way to securely bootstrap protocols, or understand the cryptographic keys needed before encryption and verification.

Take encrypted email for example - a necessity today as people commonly share sensitive personal and business-related information over email. Standard email messages are sent in plain text, so it's possible for someone else to access them and use that sensitive information for nefarious acts, but encrypting emails makes the messages unreadable to anyone who doesn't possess a decryption key. It's like locking a message in a safe, then shipping that safe. Without the key, the information stays locked inside.

Common email protocols, like S/MIME and OpenPGP, do not include automatic mechanisms to securely learn the key(s) of remote users. Therefore, without a standard, accepted mechanism, many users accomplish this today by using OOB key delivery, such as having in-person meetings and vetting the key/identity mapping before the need to send encrypted



email. An example is to carry a key on an USB stick between parties. Once a key has been securely learned for a recipient out of band, encrypted email can be sent at any time but only the holder of that public key's private portion will be able to decrypt it.

Recently, however, a simple observation has sparked a flurry of innovation. For those protocols that use the Domain Name System (DNS), secure key learning can be accomplished from DNS itself and verified by the DNS Security Extensions (DNSSEC). The Internet Engineering Task Force (IETF) has started standardizing a suite of protocols called [DNS-based Authentication of Named Entities \(DANE\)](#) to do secure key learning in a general way for Internet services. DANE is a relevant security solution for deployment in today's Internet and it is ready for use. DNSSEC has now become operationally viable and is already being [used to verify DNS zone contents](#). Putting DANE into DNS zones lets authorities extend authentication from DNSSEC data to DNS-reliant services (like S/MIME, TLS, IPSec, etc.). As DNSSEC evolves, all DANE-reliant protocols automatically gain secure key learning and rely on DNSSEC for bootstrapping.

Recall that there currently is no standard protocol that would allow a user to send encrypted email without per-user OOB key learning. Revisiting this example, by using DANE, encrypted email can be sent between any parties without prior key exchange because of the previously non-existent secure key learning. In this case, the value proposition for DANE is not just about its reduced attack surface, but rather more about the new conveniences it enables.

### **Why is DANE a good idea?**

DANE is particularly timely because it is being deployed by forward thinking and security conscious operators, today. It isn't a ground-up/green-field design that requires new infrastructure, new logic, new trusted authorities or other leaps of faith. Rather, it uses time-tested infrastructure, it simplifies what could be a complicated key learning process and many of the services that would use it are already reliant on the same substrate: DNS. DNS is a 30+ year operationally

vetted technology that underlies almost all Internet activities. DNSSEC has been operationally deployed for more than 10 years, has been deployed in the DNS root for five and is used by the majority of TLDs today. This means that domain owners can deploy DNSSEC or purchase managed services for DNSSEC in their zones today. In some [recent work](#), Verisign Labs has shown that DANE actually measurably reduces the attack surface of legacy approaches like the WebPKI and can even enhance the usefulness and utility of Certification Authorities (CAs). What this means: Internet users can rely on DNSSEC for strong authentication that builds on what we all already use.

As an architectural substrate for secure key learning in the Internet, DANE is poised to plug security holes that have existed in many protocols for many years, to enable broad federated deployment of existing protections and to seed innovation for future protections. The beauty is that the substrate for DANE has already been deployed and run for decades so it can be used right now in the following ways: DANE+TLS for Postfix; a browser add-on for Internet Explorer, Firefox Chrome, Opera, Safari and an [S/MIME plugin for Mozilla's Thunderbird](#), and emerging projects, such as the [US National Cybersecurity Center of Excellence's \(NCCoE\) Secure Email initiative](#), are exploring ways to use DANE enhanced protocols for secure key learning.

Throughout the Internet, we have sufficed with protocols that vary from insecure, to partially secure, to occasionally/optionally secure. Part of this situation has derived from end-users' inability to directly deploy their own security precautions. DANE gives everyone a way to address this - developers, enterprises and end-users just have to take advantage of it. This means pushing for DNSSEC deployment in networks (a requirement of DANE), to embrace DANE in end systems (mail clients, browsers, etc.) and in systems deployments, and to spread the word!

To learn more about DANE and how to help better secure your online presence, visit [Verisign.com/DANE](http://Verisign.com/DANE).

## INDUSTRY EVENTS

Upcoming industry events:

- DNS-OARC's Fall Workshop in Montreal, Ontario – Oct. 3-4, 2015
- ICANN 54 in Dublin, Ireland – Oct. 18-22, 2015
- IETF 94 in Yokohama, Japan – Nov. 1-6, 2015

## LEARN MORE

To subscribe or access the archives for the Domain Name Industry Brief, please go to [Verisign.com/DNIB](http://Verisign.com/DNIB). Email your comments or questions to [domainbrief@verisign.com](mailto:domainbrief@verisign.com).

## ABOUT VERISIGN

Verisign, a global leader in domain names and Internet security, enables Internet navigation for many of the world's most recognized domain names and provides protection for websites and enterprises around the world. Verisign ensures the security, stability and resiliency of key Internet infrastructure and services, including the .com and .net domains and two of the Internet's root servers, as well as performs the root-zone maintainer functions for the core of the Internet's Domain Name System (DNS). Verisign Security Services include intelligence-driven Distributed Denial of Service Protection, iDefense Security Intelligence and Managed DNS. To learn more about what it means to be Powered by Verisign, please visit [Verisign.com](http://Verisign.com).

## METHODOLOGY

The data presented in this report for ccTLDs, including quarter-over-quarter and year-over-year metrics, reflects the information available to Verisign at the time of this report and may incorporate changes and adjustments to previously reported periods based on additional information received since the date of such prior reports, so as to more accurately reflect the growth rate of the ccTLDs. In addition, the data available for this report may not include data for the 288 ccTLD extensions that are delegated to the root, and includes only the data available at the time of the preparation of this report.

For gTLD and ccTLD data cited with Zooknic as a source, the Zooknic analysis uses a comparison of domain name root zone file changes supplemented with Whois data on a statistical sample of domain names, which lists the registrar responsible for a particular domain name, and the location of the registrant. The data has a margin of error based on the sample size and market size. The ccTLD data is based on analysis of root zone files. For more information, see [ZookNIC.com](http://ZookNIC.com). Information on or accessible through this website is not part of this report.

Statements in this announcement other than historical data and information constitute forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 as amended and Section 21E of the Securities Exchange Act of 1934 as amended. These statements involve risks and uncertainties that could cause our actual results to differ materially from those stated or implied by such forward-looking statements. The potential risks and uncertainties include, among others, the uncertainty of the impact of the U.S. government's transition of key Internet domain name functions (the Internet Assigned Numbers Authority ("IANA") function) and related root zone management functions, whether the U.S. Department of Commerce will approve any exercise by us of our right to increase the price per .com domain name, under certain circumstances, the uncertainty of whether we will be able to demonstrate to the U.S. Department of Commerce that market conditions warrant removal of the pricing restrictions on .com domain names and the uncertainty of whether we will experience other negative changes to our pricing terms; the failure to renew key agreements on similar terms, or at all; the uncertainty of future revenue and profitability and potential fluctuations in quarterly operating results due to such factors as restrictions on increasing prices under the .com Registry Agreement, changes in marketing and advertising practices, including those of third-party registrars, increasing competition, and pricing pressure from competing services offered at prices below our prices; changes in search engine algorithms and advertising payment practices; the uncertainty of whether we will successfully develop and market new products and services, the uncertainty of whether our new products and services, if any, will achieve market acceptance or result in any revenues; challenging global economic conditions; challenges of ongoing changes to Internet governance and administration; the outcome of legal or other challenges resulting from our activities or the activities of registrars or registrants, or litigation generally; the uncertainty regarding what the ultimate outcome or amount of benefit we receive, if any, from the worthless stock deduction will be; new or existing governmental laws and regulations in the U.S. or other applicable foreign jurisdictions; changes in customer behavior, Internet platforms and web-browsing patterns; system interruptions; security breaches; attacks on the Internet by hackers, viruses, or intentional acts of vandalism; whether we will be able to continue to expand our infrastructure to meet demand; the uncertainty of the expense and timing of requests for indemnification, if any, relating to completed divestitures; and the impact of the introduction of new gTLDs, any delays in their introduction, the impact of ICANN's Registry Agreement for new gTLDs, and whether our new gTLDs or the new gTLDs for which we have contracted to provide back-end registry services will be successful; and the uncertainty regarding the impact, if any, of the delegation into the root zone of a large number of new gTLDs. More information about potential factors that could affect our business and financial results is included in our filings with the SEC, including in our Annual Report on Form 10-K for the year ended Dec. 31, 2014, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K. Verisign undertakes no obligation to update any of the forward-looking statements after the date of this announcement.

[Verisign.com](http://Verisign.com)

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