



# CSC Dot Brand Insights Report

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*Research and editorial prepared by CSC  
Gretchen Olive, Director of Policy and Industry Affairs  
Connie Hon, New gTLD Product Manager  
Peter Scott, Global Brand Advisor*



## Executive summary

Although the number of activated .BRANDs increased by more than 12% over the last six months, the total number of active domains shrank by 4% over the same time period. This phenomenon is due to a reduction in the number of active domain names in domain portfolios across the Top 50 .BRANDs and a small number (average 5-10) of active domain names per activated .BRAND outside of the Top 50.

The Top 10 .BRANDs continue to add domain names but are less quick to add content. Other observations include a 10% jump in the number of active domain names that use HTTPs and very meaningful creative uses of .BRAND domain names including web applications.

Every .BRAND owner faces the same unknown after their .BRAND becomes live in the root. “What do we do with our .BRAND so that we can get a return on investment?” is the question often asked. We were privileged to speak with two of our .BRAND clients—.CERN and .SAXO in an [exclusive interview](#) to gain insights into the hurdles they faced and their successes in the activation of their .BRANDs. We learned that a strategy is necessary, a dedicated cross-functional task force is required to look after all developments in the .BRAND, and tactics, goals, policies, and strategies must be fluid to respond nimbly to changes.

Cyber security is legitimately high on the priority list of many C-level executives in recent years, so much so that worldwide spending in cyber security is predicted to grow 8.7% to \$124B USD in 2019<sup>1</sup>. As companies are increasingly reliant on the internet to conduct their business and grow revenue through online leads and conversions, cyber threats have greatly intensified and have impacted that business growth, put a dent in brand reputation, and diminished returns. It is clear that security and success go hand-in-hand.

In our feature on “[.BRANDs and security](#),” we explore how .BRANDs, using a variety of mechanisms, are in a great position to secure their online presence. We provide a high-level overview of how .BRANDs can help achieve success in security, and therefore make the investment work to the advantage of the business.

<sup>1</sup>[Gartner, Inc. Forecasts Worldwide Information Security Spending to Exceed \\$124B USD in 2019](#)

## Number of activated dot brands

173

### Top 10 activated dot brands

Rank	TLD	# Activations	Industry
1 Last report: 2	↑ dvag	2435 +961	Finance and money
2 Last report: 1	↓ mma	1657 -19	Insurance
3 Last report: 3	→ audi	1214 +484	Automotive, tires, other vehicles
4 Last report: 6	↑ allfinanz	677 +371	Insurance
5 Last report: 5	→ seat	652 +38	Automotive, tires, other vehicles
6 Last report: 4	↓ neustar	628 +9	Internet services
7 Last report: 7	→ mini	610 +316	Automotive, tires, other vehicles
8 Last report: --	↑ gmx	472 --	Internet services
9 Last report: --	↑ crs	396 --	Associations and Clubs
10 Last report: 8	↓ aco	290 +9	Construction, engineering, equipment

*.DVAG and .ALLFINANZ continue to activate domain names for their workforce of advisors. .AUDI, .SEAT, and .MINI made notable activations per dealer globally. New to the list are .GMX and .CRS.*

## Top 5 active industry sectors

- 1 Insurance
- 2 Automotive, tires, and other vehicles
- 3 Finance and money
- 4 Internet services
- 5 Construction, engineering, and equipment

### Activated dot brands

.BRANDS that have registered five or more domain names in their respective .BRAND top-level domains (TLDs).

### Active domains

.BRAND domain names that resolve to meaningful content, including those using 301 and 302 redirects to existing websites. For an accurate representation of the level of activation in .BRAND domains, we have omitted NIC.TLDs and testing domains.

**Active dot brand domain names**

**70%**

- 4.0% since last report

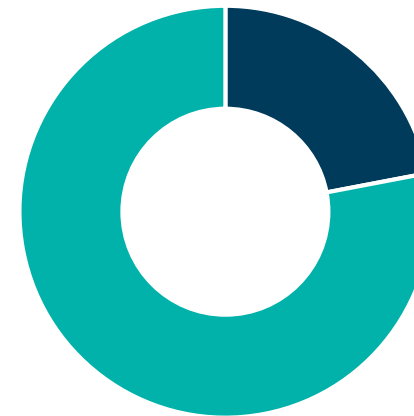
**Percentage of active domains using HTTPS**

**78%**

+ 10% since last report



■ Inactive ■ Active

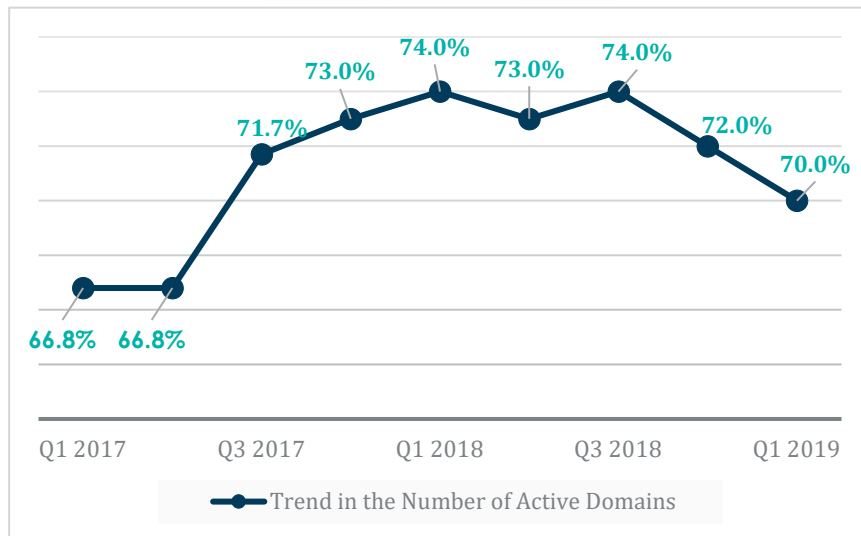


■ No SSL ■ SSL

*There is a slight dip of 4% in the number of .BRAND domain names that have activated as a percentage of the total number of .BRAND domain names registered since Q3 2018. This mirrors a 2% shrink in the total number of .BRAND domain names registered. Activation and registration numbers are largely driven by the top activated .BRAND and do not reflect the overall rate of activation across .BRANDs with fewer domains.*

*A marked jump of 10% in the percentage of active .BRAND TLD sites that implement secure sockets layer (SSL) certificates. More .BRAND websites and microsites use the HTTPS protocol compared to non-.BRAND websites. This is a sign that .BRAND sites are very responsive to calls from search engines for HTTPS to be implemented for improved security and reliability for user experience.*

### Trend in the number of active domains



The adoption rate of .BRANDs steadily increased for a year from Q1 2017, largely driven by an increase in adoption across the top activated .BRANDs. The adoption rate dipped slightly from Q3 2018 despite the number of activated .BRANDs increasing from 154 to 173 this quarter, reflecting consolidation by top activated .BRANDs. Percentages were derived from data one month after the end of each calendar quarter.

### Top 5 registered domain names

- 1 home
- 2 www
- 3 careers
- 4 my
- 5 jobs

“Home” and “www” have a leading foothold across .BRAND registrations. “My” is often used for secure login portals, but more so for the two-letter country code that it may represent. “Careers” and “jobs” are popularly used, as .BRAND owners recognize that innovation and industry leadership are intrinsic qualities their .BRANDs provide, and are therefore useful for attracting the best talent to their organizations.

### Top 5 registered two-character geographical domain names



*The top four spots remain unchanged. Fifth entrant “id” edged out “it.” Apart from “de” and “uk,” “my,” “go,” and “id” may be used to represent secure login portals, network logins, actionable sites, and sites with personalized content. High adoption of “de” and “uk” represent a healthy rate of representation for the European region.*

### Top 5 registered non two-character geographical names



*The top five non two-character geographical names remain unchanged. We continue to anticipate that more city names will join the list with the future popularity of voice search. Meanwhile, it may be useful to note that “global,” “worldwide,” and “international” stand out as popular representations of corporate websites; these can be used to drive home the message that the corporate entity is both successful and reliable, and can also be used as online directories for global offices.*



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## Recent activations

### Seamless web application

- Google operates .NEW as a generic top-level domain, and activated **DOC.NEW** for itself. Users entering *DOC.NEW* into a browser will either open up a new Google document within the browser or be directed to the sign-in page.

### Exclusive sign-up page

- **VisitBratislava.Erni** is an online form to collect direct sign ups who wished to visit the office of Erni Electronics in Bratislava.
- Schaeffler Technologies activated **SkylineSoiree.Schaeffler** as a sign-up form for corporate participants who, under Schaeffler’s exclusive invitation, attend the annual Skyline Soiree event hosted by The American Cancer Society in Chicago.

### Recruitment

- Use of a .BRAND in recruitment impresses upon talents that the company is innovative, dynamic, and an industry leader.
- Mango attracts new tech hires through **Tech.Mango**.
- Canon woos new hires to its facility in Nagasaki by showcasing its workforce, cutting-edge tech, and more in **Nagasaki.Canon**.

## Active domains with an Alexa ranking (high-traffic sites)

82

Alexa.com ranks websites based on their estimated traffic.

The Alexa Top 1M is a listing of the million most popular sites on the web based on traffic, and has been commonly used by the domain industry for many years.

Dot brand domains	Current Alexa rank	Previous Alexa rank
<b>pki.goog</b>	138	--
<b>travel.yandex</b>	34,120	--
<b>www.yandex</b>	31,433	--
<b>shad.yandex</b>	34,369	--
<b>driver.yandex</b>	35,136	--



Do you need advice on your dot brand?

Request a CSC .BRAND strategic analysis.



## An interview with .CERN and .SAXO on their .BRAND journeys

If .BRAND owners had a chance to mingle, what would they discuss? Besides talk of money invested and time spent on their .BRANDs, they're likely to ask one another, "What is your strategy?," "What are your hurdles," or "How did you get internal buy-in to activate?," and "Where did you begin?"

Here at CSC, we manage a third of all .BRANDs that came online from the ICANN<sup>2</sup> 2012 round of new gTLD applications. We're privileged to have sat down with our distinguished .BRAND clients to find out the answers to these burning questions. Thank you Kate Kahle and Sotirios Boutas from .CERN, and Ian Peter Semey from .SAXO.



**CERN**, the European Organization for Nuclear Research, is one of the world's largest and most respected centers for scientific research, attracting scientists from around the world seeking answers to fundamental questions such as "What is the nature of our universe?" and "What is it made of?" Key achievements, such as identifying the Higgs boson particle<sup>3</sup> and the Large Hadron Collider<sup>4</sup>, shaped the understanding of our world. Besides breakthroughs in the realm of physics, CERN accelerates science in all shapes and forms. The World Wide Web, now an integral part of our everyday lives, was born at CERN 30 years ago<sup>5</sup>.



**Kate Kahle** is head of Editorial Content Development at CERN. Her team is in charge of the website, social media, and editorial content for online and offline publications. Kate's team is also responsible for the implementation of .CERN.



**Sotirios Boutas** is the web manager at CERN. Sotirios' team is responsible for both the design and technical standards of CERN's websites. His team crafts guidelines for these sites, and communicates them internally.



**Ian Semey** manages the public websites of Saxo Bank. His work includes developing daily digital content for Saxo Bank's proprietary systems and the content management system (CMS), Sitecore that feeds content to these sites. He also coordinates with teams who integrate application programming interfaces from different banking systems that further provide information, data, and content necessary for the operation and full function of Saxo Bank's websites and portals. An extension of Ian's work is in administrating and managing domain name applications from within the organization, developing the internal registration policy, and communicating anything regarding domain names internally.



**Saxo Bank** is a Danish fintech and regtech specialist in online trading and investment. With over two decades of growth and success attributed to sophisticated technology and industry expertise, Saxo's vision is to democratize trading and investment, essentially providing traders and investors with the same professional tools and market access as fund managers and large financial institutions.





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**How have you been instrumental in getting the .BRAND activated?**

**Kate:** I took over responsibility for .CERN in February 2016. Prior to that, my predecessor Dan had done the groundwork to take .CERN through from application to delegation. He activated HOME.CERN in October 2015, but it was not completely clear within the organization which direction we should take from that point. From February 2016 onwards, I had the task to establish our strategy, with the help of Sotirios, for moving forward .CERN.

**Sotirios:** One of the first things that we did was, we studied our organization and how our legacy websites on CERN.CH served our various stakeholders.

**Ian:** My predecessor started the process of applying for and initiating the technical set up of .SAXO. I took over the role three months prior to launch of .SAXO and the immediate work I was faced with was how I could fit .SAXO into our organization. Fortunately, we had plans for a major overhaul of our content management system and our online presence around the same time. We wanted to switch away from our old CMS system on Sharepoint to the Sitecore CMS system. We needed to update the design, imagery, content, and structure of all legacy Saxo Bank sites that were designed in a variety of ways over the years. We had also identified earlier on that it was necessary to shift our legacy sites from desktop to mobile-first. This complete metamorphosis meant that .SAXO became the natural candidate for the new face and home for all of our online presence.

**Is there a particular process that you laid out, and planned for to activate the .BRAND? Where is the .BRAND in this process currently?**

**Kate:** My predecessor established an internal policy for the registration of second-level domains. It had a rather spontaneous, bottom-up approach where anyone from within the organization could apply for a .CERN domain name for themselves. A “Top Level Domain Board” would then decide on the merit of each application against the policy criteria. We inherited and updated aspects of this process. One issue that we found with this bottom-up approach was that the core,

outward-facing areas of CERN were lagging behind in making these applications. We were able to identify the key outward-facing areas of CERN, such as recruitment, and invited HR to be a part of .CERN. HR would come to own JOBS.CERN and CAREERS.CERN. We also worked with colleagues in outreach, such as the teams who manage CERN visits and events. By doing so, we implemented a top-down manner into our internal process so that it was no longer entirely bottom-up.

**Ian:** .SAXO was the unifying factor for all of our online presence, so we made sure to include .SAXO in all of our internal communications, proposals, and plans in relation to the overhaul. We had planned for a seamless, total migration and within the organization, .SAXO was innately accepted to be part of the change. On .SAXO, the new sites were of an entirely new look and feel, content, structure and this whole brand new persona was very well received by both internal and external stakeholders.

We also had a management reason for moving everything to .SAXO. Due to differences in banking regulation all over the world, our operating sites were named differently. Our main domain name was SAXOBANK.COM and country-specific websites may or may not have “bank” in such as in Hong Kong. By changing the domain structure to www.home.saxo/(language)-(country-code), we unified domain structure across all of our public facing websites. We migrated 39 standalone websites and 20 mobile websites into HOME.SAXO, and we had the teams in each country operate their own sub-directories.

Once we had a uniform domain structure with everything authoritative and public-facing coming to .SAXO, we could enhance search engine optimization (SEO) for .SAXO. Improving our organic ranking across search engines is an ongoing exercise, and having everything at .SAXO makes it easy for us to achieve our SEO goals while helping us greatly save on search engine marketing spend year-over-year. Optimizing our search engine

rankings for .SAXO allows us to maximize investments that we make in paid advertising.

We weighed the advantages and disadvantages to moving everything. On internal systems, software, networks, and infrastructure where saxobank.com was hard-coded and their uses were not public-facing, we opted not to move them to .SAXO. Also for content that did not have a high flux rate or required to be changed regularly but were operational or compliant in nature, we did not choose to move these as well. We decided on a guideline - legacy items that were running on IT systems, not used by marketing or crawled by search engines, would stay as they are and not be moved to .SAXO.

### **Can you recall specifically the challenges that you had faced in getting the .BRAND to this stage? How did you overcome them?**

**Kate:** We had to evolve the internal registration policy as we encountered issues over time. We also had to modify the set of criteria by which we assessed and qualified .CERN domain name applications.

We also encountered issues in domain nomenclature. For example, IT.CERN could refer to CERN's Information Technology department, or it could refer to CERN's connection with Italy as a Member State of the Organization. We had to decide what made sense for the organization in deciding how we would treat the various two, three, and longer character domain names that could mean more than one thing.

Before .CERN, our websites were subdomains within our legacy domain name CERN.CH. But the .CH domain was a consequence of the Organization having its administration in Switzerland and being an early adopter of the technology. But, consequently, it didn't reflect the truly international nature of CERN as an intergovernmental organization. This was one of the advantages of exploring a move to .CERN across the organization.

**Sotirios:** We have about 14,000 active websites at CERN—among them, more than 1,000 websites representing key areas. We were faced with an enormous task of deciding who should be allocated which domain name, but at the same time, this was our chance to work our way through sifting out websites that were personal sites; sites that were out of date and unofficial websites. We were able to prioritize the application requests based on which sites were outward facing or official, and we were able to begin cleaning up our online presence due to organizing them around .CERN.

**Kate:** It soon became clear that we would never be able to fully migrate all CERN.CH websites over to .CERN. We had been using CERN.CH for such a long time that CERN.CH was hard-coded into software. Fully replacing CERN.CH was out of the question. The agreement we now have with IT and management is that we would use .CERN as a subset, for outward facing websites. To promote an understanding within the organization on the role of .CERN, we used the analogy that .CERN is the shop window, while CERN.CH is the stockroom.

**Ian:** Having all our online presence moved to HOME.SAXO was an exercise in reducing complexity, and it was a pretty successful exercise, in most parts. The teams maintaining each site (directory) are now more efficient and feel more empowered as they are able to work faster and speed up installations of any changes or updates that are in relation to campaigns. We are essentially in greater control of all our sites, even throughout further modifications and revisions, but we also need to be fluid enough to respond effectively to changes.

The difficulty with updating content in all 16 languages on our 24 sites in a timely and reliable manner is reduced with the uniform design and structure applied to all our sites, but that difficulty is never going to go away entirely due to the nature of the translation work.

Moreover, every now and then, we will have to remind internal teams to think about using HOME.SAXO or .SAXO domain names whenever they needed to create marketing or if they conceived anything new and public-facing. Old habits of using the national language top level domain is a difficult one to change. As long as we have anything that is going to be publicly announced, or engage the public in any shape or form—plus likely to be crawled by search engines—we put them on .SAXO so as to add SEO value.

### *What should we expect to see from your .BRAND in 2019?*

**Kate:** With the help of IT, we are starting to explore the use of .CERN for email. From meeting with other .BRANDS, we have learned how email works and does not work for their .BRAND. We will conduct tests to see if it makes sense to advance to further development and implementation.

This year, the organization is migrating our Drupal 7 websites over to Drupal 8<sup>6</sup>. While helping us determine a stronger look and feel of our .CERN websites, this process is also enabling us to clean up our online presence.

We will continue to refine our registration policy and take onboard lessons learned in the past years before moving ahead.

**Ian:** Right now we have all our public websites on .SAXO apart from our Chinese website. With the Chinese site, we have to also be mindful that data that comes into the Chinese site has to reside on the CN.SAXOBANK.COM domain, otherwise the data will not be accelerated and populated to our Chinese users. Due to internet regulations within China that were in place since January 1, 2018, it is necessary to whitelist our .SAXO top level domain with the Chinese government. The regulatory arm who issues this license is the Ministry of Industry and Information Technology (MIIT) and we are in process of obtaining this license to operate .SAXO in China. We hope to get the green light within 2019 to pave the way for our banking license from China. Thereafter, we will be integrating our

Chinese website into HOME.SAXO and assume its operations as we have done for our other country sites.

Our IT department still runs some services on SAXOBANK.COM and some .DK domains. We plan to move as many of these as possible to .SAXO, as long as they are of public-facing nature. We will leave services that are not public-facing untouched, since many of them have to do with the operation of internal systems, software, networks and infrastructure that underlie many of our ongoing operations and do not impact the SEO value of .SAXO.

### *If you had advice for another .BRAND wanting to activate, what would it be?*

**Kate:** From my experience, it was important that the strategy for .CERN went beyond being a defensive measure to protect the CERN brand online. Granted, having control of our .BRAND is a vital part of defensive brand strategy, but it was really important for us to also take a good look at the strengths of our brand within our Organization to see where .CERN could be a good fit.

Whenever we spoke to other .BRANDS, we learned that each one had a different need for their .BRAND. For us, it was to get a more consistent online presence, but for other .BRANDS it could be something else, and it is helpful for them to figure out what that is at the beginning.

Resources are needed, especially having the right people from cross-functional groups come together to iron this out. Cross-functional collaboration could involve people from management, technical, marketing, internal communications, and legal teams. The .BRAND should not be the sole responsibility of any one particular department, you need the right mix of cross-functional talents.

**Sotirios:** Very few .BRAND owners do deep research about what to do with their .BRANDs in the early stages. Their priority in these early times is simply to apply for their .BRAND to secure it for themselves. So after they have their .BRANDs, the sooner they can have cross-functional team members come together to think about their strategy, the sooner they can plan, allocate resources, test, monitor, develop and roll out their .BRAND activations to work towards their .BRAND goals. No part of this process can be achieved in isolation. The glue holding all these pieces together to move them forward is really the right mix of talents who will bring different constructive perspectives to the discussion table.

**Ian:** I believe it is difficult for any organization to justify migrating to a new domain when there is no major platform and design switch like the one we had done at Saxo Bank. It is also very important to have buy-in from the top level of the organization, as this is an essential part of the brand identity, especially for companies where the digital presence is as important as ours.

The most critical question organizations will face is, “What is the impact on the SEO value of the brand?” and it’s tough to build up SEO value when you have a disparate portfolio of websites—legacy websites and country-specific websites in addition to .BRAND websites. If the success of the organization’s business rely greatly on the internet in terms of traffic, leads and conversions, one has to plan carefully in order to leverage on the potential SEO value of the .BRAND.

A dedicated team is essential to oversee all migration work from one domain to another, that the work progresses as smoothly as possible, and have room to accommodate hiccups along the way. The SEO value of legacy sites will take a hit due to the transition, but as in our case, we were able to provide new, consistent, and more frequently updated content valuable to our users, plus closely monitor and quickly respond to errors along the way, our SEO score recovered expeditiously and reached higher heights than before the domain was changed. We could observe that our SEO score improved considerably after the migration. This had a direct implication on our marketing spend on ads across the various search engines.

## Celebrate the World Wide Web’s 30th anniversary with CERN

CERN will celebrate 30 years of the web on March 12, 2019.

To organize a viewing party, all you need is a room with webcast equipment, and an internet connection (webcast streaming: Full HD (1080p) at 5Mbit/s). Then invite your colleagues and friends, and tune in to the Web@30 webcast!

To confirm your participation and get more information from CERN, [register your viewing party](#). Registration will ensure that your event appears on the interactive map on the Web@30 website.

[More info here](#) and [here](#).

### References

<sup>2</sup>[Internet Corporation for Assigned Names and Numbers](#)

<sup>3</sup>[The Higgs Boson](#)

<sup>4</sup>[The Large Hadron Collider](#)

<sup>5</sup>CERN will celebrate [30 years of the web on March 12, 2019](#)

<sup>6</sup>Drupal is an open source website development platform that can simplify the online management of content and users

## In focus

### .BRANDs and security

March 12, 2019 marks 30 years since the concept and creation of the World Wide Web by a young graduate of Oxford University, Tim Berners-Lee, at CERN. Taking time to appreciate how much the WWW has impacted our daily lives, also imagine what life would be like had WWW stayed with its original design.

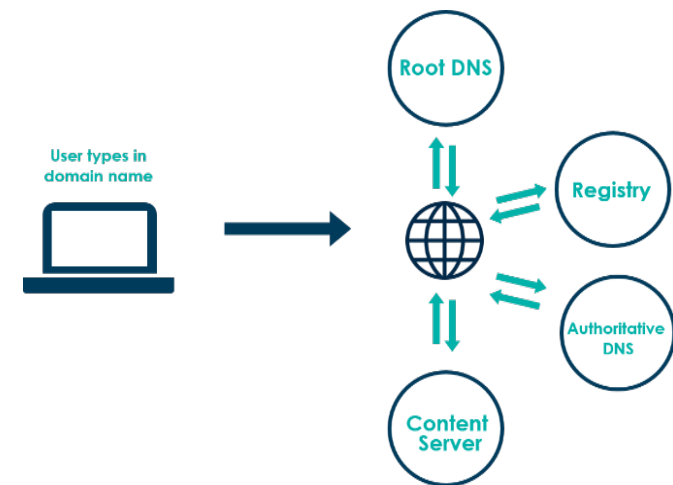
The first network was not open for participation by the general public and therefore, security concerns were not major design considerations for DNS software or any software for deployment on the early internet<sup>7</sup>. The latter expansion of the internet into the commercial sector in the 1990s started scientists pondering the requirements for security that would protect data integrity and user authentication.

Today, there are almost as many forms of security threats as instances where the internet benefit us. Governments, banks, the media, and hospitals are the usual targets with data breaches growing by the year. Data breaches in 2018 compromised the personal information of millions of people around the world. Among them, the biggest victims in terms of number of individuals affected was the Indian government. India's government ID database, which stores citizen identity and biometric info, experienced a data leak on a system run by a state-owned utility company. The company had not secured access to their database, leading to a leak of names, ID numbers, bank account information, and more for 1.1 billion India citizens<sup>8</sup>.

Data breaches can happen for a variety of reasons. Sometimes, data are mishandled or sold to third parties. Sometimes, databases are hacked. Elsewhere, loopholes in an organization's online infrastructure leave information unprotected.

It's in the last two categories—hacking and loopholes—that .BRAND owners can leverage the power of their .BRANDs to overcome security threats such as **DNS cache poisoning**, **domain hijacking**, and **email spoofing**, because having a .BRAND requires organizations to stay on top of online developments, becoming super quick to respond with necessary modifications in internal policies, implementations, and project plans.

#### How does public DNS work?

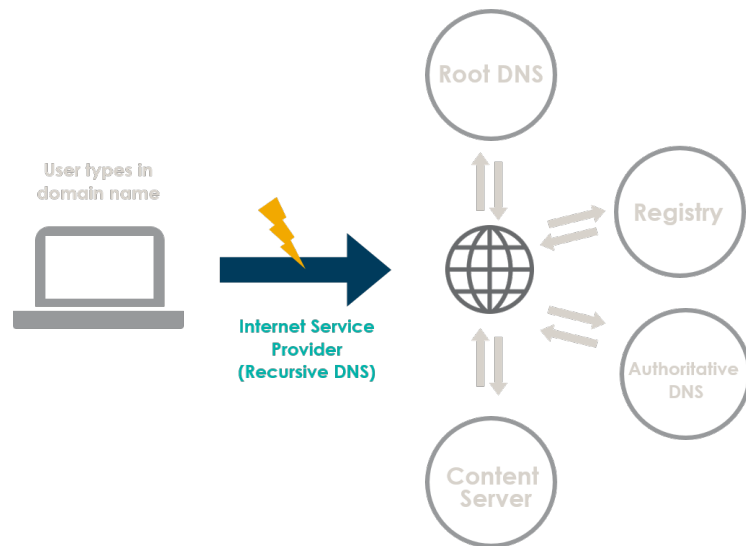


The DNS is the phone book of the public internet. It tells querying computers where to send and retrieve information.

In a typical request made through the internet, the querying computer asks a recursive server (or public DNS resolver) where a particular website EXAMPLE.TLD can be found. If the recursive server (denoted by

the globe icon above) has cached (stored) the A record of EXAMPLE.TLD, it tells the querying computer where to go to retrieve information from the right web server. If the recursive sever does not have this information stored, it asks the root server or root DNS, the location after the dot, that points the recursive server to the direction of the top-level DNS server or registry. The recursive server then asks the top-level DNS server or registry “.TLD” who points the recursive server to the direction of the authoritative DNS server, which responses with the A record of EXAMPLE.TLD. The recursive server informs the querying computer what that is, and the querying computer then caches this A record, and visits the content server that hosts EXAMPLE.TLD.

### What can go wrong with this form of DNS look up?



**DNS cache poisoning or DNS spoofing.** The recursive server is typically a free, public server located in closest proximity to the querying computer. If the cached records on the recursive server are wrong due to possible man-in-the-middle-attacks, querying computers get directed to the wrong site. At times, these sites are created with malicious intent and users who visit these sites or applications are manipulated to download malware or have their credentials phished. In the worst cases, the wrong records spread to other recursive servers, exacerbating DNS cache poisoning and enlarging the pool of potential victims around the world.

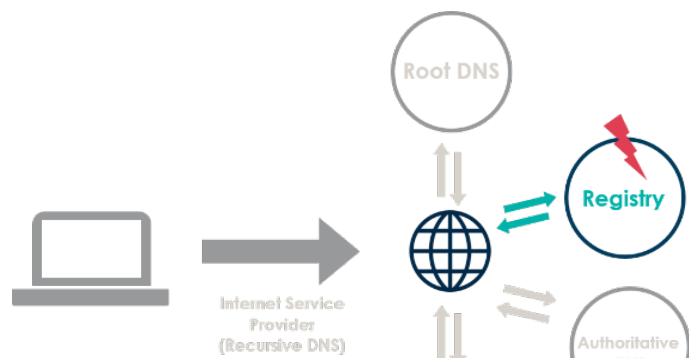
### Is there a solution to overcome DNS cache poisoning?

DNS cache poisoning is a problem because a typical recursive server has no real way of determining whether DNS responses received are legitimate or had been manipulated.

Domain Name System Security Extensions (DNSSEC) is a resource that is the long-term solution to DNS cache poisoning. Before DNS records are cached in recursive servers, each DNS response in a DNS look up is validated against public-key cryptography and enables the querying computer to know whether a DNS record should be trusted or whether it's been poisoned.

ICANN has also recognized the “ongoing and significant risk to key parts of the DNS infrastructure” and on February 22, 2019 made a call for “full DNSSEC deployment across all unsecured domain names... to ensure the security, stability and resiliency<sup>9</sup>” of the internet.

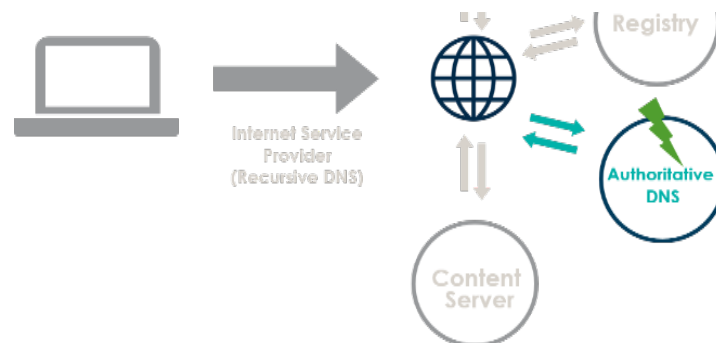
## Secure DNS look ups: how .BRANDs can easily implement DNSSEC



There is a catch. The entire chain of DNS look up must be signed for DNSSEC to work. The root DNS servers are signed, but the subsequent top-level DNS server and authoritative DNS servers must be signed too. This is where .BRANDs can close the gaps, because they have total control over their top-level DNS and authoritative DNS servers. Unlike most organizations whose domain names end in a generic top-level domain, .BRANDs can apply DNSSEC to their top-level DNS and authoritative DNS servers, adding glue records for domain names whose domain name servers are subdomains of the domain names under query.

To complete both sides of DNSSEC requirements, the domain registrar and DNS hosting provider must support DNSSEC<sup>10</sup>. CSC<sup>11</sup> supports DNSSEC and so do the DNS hosting providers with whom we partner. In the case of recursive servers—operated either by commercial companies offering their services for free use by the public, or by public enthusiasts eager to help spread new technologies and support non-profit communities—a number of them<sup>12</sup> support validation via DNSSEC. You can test if a recursive server in your network validates DNSSEC [here](#).

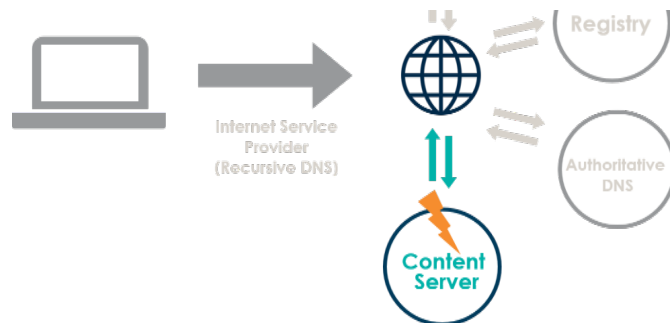
## Prevent domain theft: .BRANDs can easily implement registry lock



**Domain hijacking or domain theft** is the act of changing the registration details of a domain name without the permission of its original registrant, or by hacking into registrar or domain hosting systems. The hit taken by the original domain registrant can be hefty in terms of huge financial losses, especially if the registrant's business depends heavily on online traffic and conversions arriving at that particular domain. Hijacking is even more severe if the hijacker uses the domain name to facilitate illegal activities such as phishing and distribution of malware. On January 23, 2019, the U.S. Department of Homeland Security issued an emergency directive to all federal agencies, giving their IT employees 10 days to audit DNS records for all their web domains and other agency-managed domains. This directive was a result of a series of recent incidents involving DNS hijacking<sup>13</sup>.

Domain hijacking can be prevented with a suite of activities. First, the domain name should be locked at the registry and registrar levels, ensuring that any DNS modifications are not carried out without the explicit approval of the domain name owner. Second, the domain name should be managed by an enterprise-level registrar who can provide two-factor authentication and DNSSEC. CSC is able to support locks that all top-level registries support, and can help .BRAND owners implement registry locks.

## Eradicate email spoofing: how your .BRAND helps



.BRANDs are unique because they are used only by the .BRAND owner, meaning any email message sent using a .BRAND email address originates from the brand owner. That being said, email messages are still routed with the help of the DNS. Therefore, email messaging remains vulnerable to DNS cache poisoning due to malicious servers posing as authoritative servers. .BRAND owners must understand the importance of implementing DNSSEC as an underlying security requirement prior to using their .BRANDs for email.

.BRAND owners can implement Domain-based Message Authentication, Reporting and Conformance (DMARC) to further ensure the security and increase trust of their outgoing .BRAND emails. Hackers often use an email spoofing technique to fool someone into clicking on a phishing link that looks like it's from a trusted domain. DMARC can help prevent that.

DMARC is an email-validation system designed to detect and prevent email spoofing by allowing the email administrator to publish a policy in their domain name's DNS record, specifying if Domainkeys Identified Mail (DKIM), Sender Policy Framework (SPF), or both are employed when email

is sent from that domain name. Sending emails with the use of DMARC ensures the receiver that the email is authentic and if not, informs the receiver of what next to do. Research shows that organizations using the protocol receive just 23% of email threats compared with those that do not, meaning spoofed emails are caught more often<sup>14</sup>.

**In summary, a .BRAND sets the rules—owns the property and determines all policies**

During its upcoming ICANN64 public meeting in Kobe, Japan, ICANN is planning an event to facilitate the internet community to address DNS protection.

Speak to our team to find out the many ways your business can benefit from your .BRAND. Email us at [newgtlds@cscinfo.com](mailto:newgtlds@cscinfo.com).

## References

<sup>7</sup>Wikipedia: [Domain Name System](#)

<sup>8</sup>[Aadhaar breach](#)

<sup>9</sup>[ICANN Calls for Full DNSSEC Deployment, Promotes Community Collaboration to Protect the Internet](#)

<sup>10</sup>Internet Society: [How to Secure and Sign Your Domain with DNSSEC Using Domain Registrars](#)

<sup>11</sup>ICANN accredited registrars who support DNSSEC: [icann.org/resources/pages/deployment-2012-02-25-en](https://icann.org/resources/pages/deployment-2012-02-25-en)

<sup>12</sup>Recursive server operators DNSSEC support status:

[en.wikipedia.org/wiki/Public\\_recursive\\_name\\_server](https://en.wikipedia.org/wiki/Public_recursive_name_server)

<sup>13</sup>[DHS Orders U.S. Federal Agencies to Audit DNS Security for Their Domains](#)

<sup>14</sup>[The U.S. Government is Making Federal Communications More Secure](#)



## About CSC

CSC helps businesses thrive online. We help effectively manage, promote, and secure our clients' valuable brand assets against the threats of the online world. Leading companies around the world choose us to be their trusted partner, including more than 65% of the Interbrand® 100 Best Global Brands. Leveraging state-of-the-art technology, Digital Brand Services delivers outstanding outcomes through our unique account management structure. With our expert, dedicated team, you'll have a daily point of contact to ensure your brand has the strength it needs to succeed in the 21st century. We help consolidate and secure, monitor and enforce, then optimize and promote your brands to maximize your digital presence, secure your digital intellectual property, and reduce costs.

Contact us at [cscdigitalbrand.services](https://www.cscdigitalbrand.services).



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