

# Domain Name Basics

## Domains

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# What is a domain name?

It is a **unique string** within the domain name system (DNS). The DNS is a tree, and its root is a dot.

Most programs, like browsers and email clients, will ignore the point at the end of a domain name, but it is there.

DNS resolves names; It is a method to **translate** domain names to **IP addresses**, to make it easier to remember.

The DNS **zone file** contains **mappings** between domain names and IP addresses and other resources.



# What is a top-level domain?

It is the name of the top tier and it is divided in two groups:

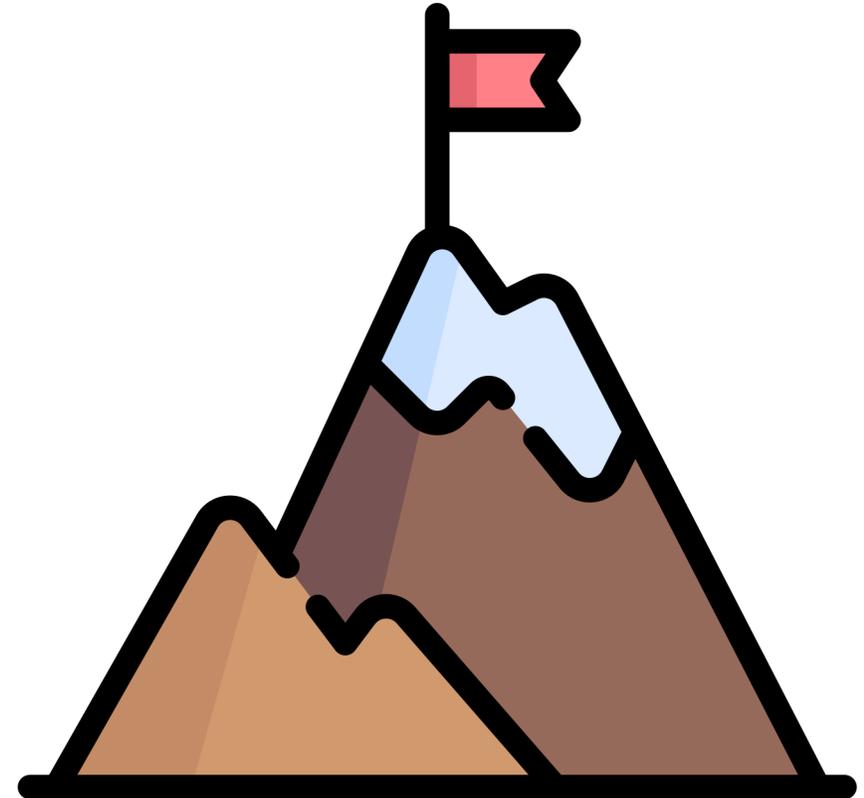
- Generic TLDs (gTLDs) for instance .com, .net, and .org
- Country Code TLDs (ccTLDs) like .de, .io, .uk, and many more.

Actually there are more than **1,200 gTLDs**, among others

- .asia, .berlin, .bike, .cat, .club, .com, .edu, .guru, .info, .jobs, .name, .net, .ngo, .nyc, .org, .post, .tel, .xyz, .xxx

There are over **200 ccTLDs**, such as

- .au, .br, .cn, .co, .de, .fr, .hk, .it, .io, .me, .ru, .uk, .us, .za



# Launch of new TLDs #1

There are typically 3 phases during the launch of a TLD – **Sunrise** (SR), **Landrush** (LR), and **General Availability** (GA).

- There is a Sunrise period in which trademark owners can get the first claim on domain names matching their marks.
- In Landrush, prices are generally higher, and there are auctions if more than one person is interested in the same name.

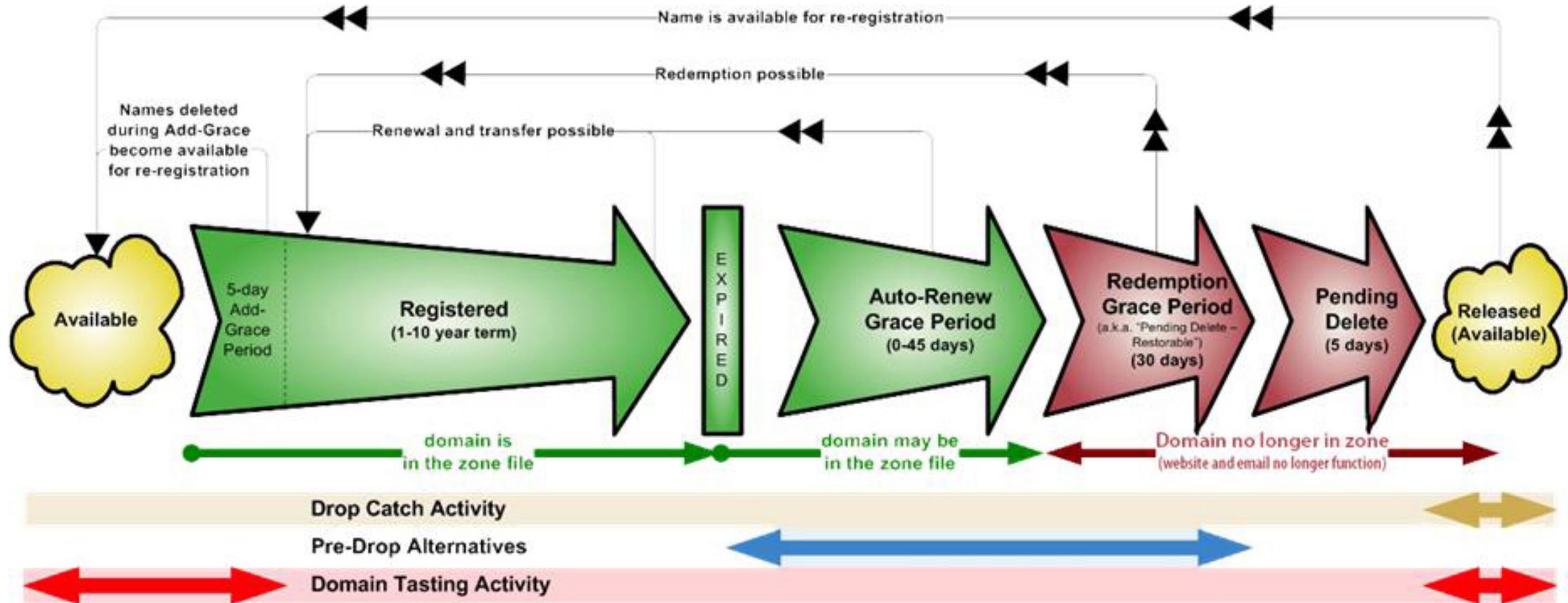


# Launch of new TLDs #2

- **Early Access Phase (EAP)** is a particular case, it is recently used, and it usually replaces the Landrush. Setup fees vary depending on which day of EAP a registrant chooses to purchase a domain.
- Finally, the domain enters **General Availability**, and the names are available to register regularly at the domain registrar.



# Life Cycle of a gTLD Domain



# What these periods mean? #1

## **Add Grace**

After the initial registration of a domain, this period lasts five days. In case of deletion during this period, the registry may give credit.

## **Registered**

Depending on the TLD, a registrant can usually register a domain for 1 to 10 years.



# What these periods mean? #2

## **Auto-Renew Grace**

After a domain registration expires, the registry extends (renew) the domain automatically typically. In case of deletion during this period, the operator may give credit.

## **Redemption Grace**

This status indicates that the registrar has asked the registry to delete a domain. It is possible to restore the name in this period.



# What these periods mean? #3

## **Pending Delete**

After five calendar days following the end of the Redemption Grace Period, the domain is purged from the registry database and becomes available for registration.



# Domain Name Status Codes #1

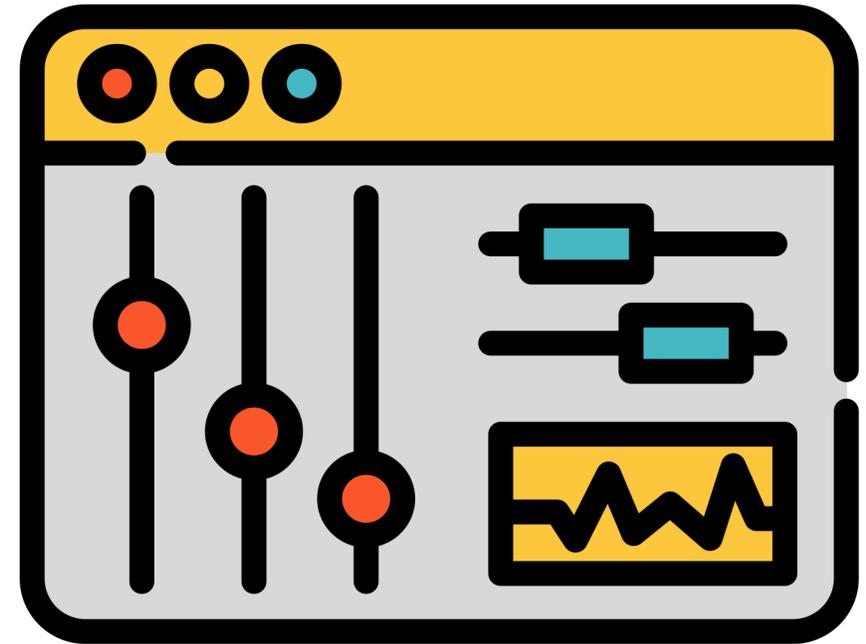
**Registrars** can **set client** codes, and **Registries** can **set server codes**. Server codes take precedence over client codes.

## \*TransferProhibited

This status code prevents a domain from being transferred from one registrar to another.

## \*DeleteProhibited

This status code prevents a domain from being deleted..



# Domain Name Status Codes #2

## \*UpdateProhibited

This status code locks a domain preventing it from being updated.

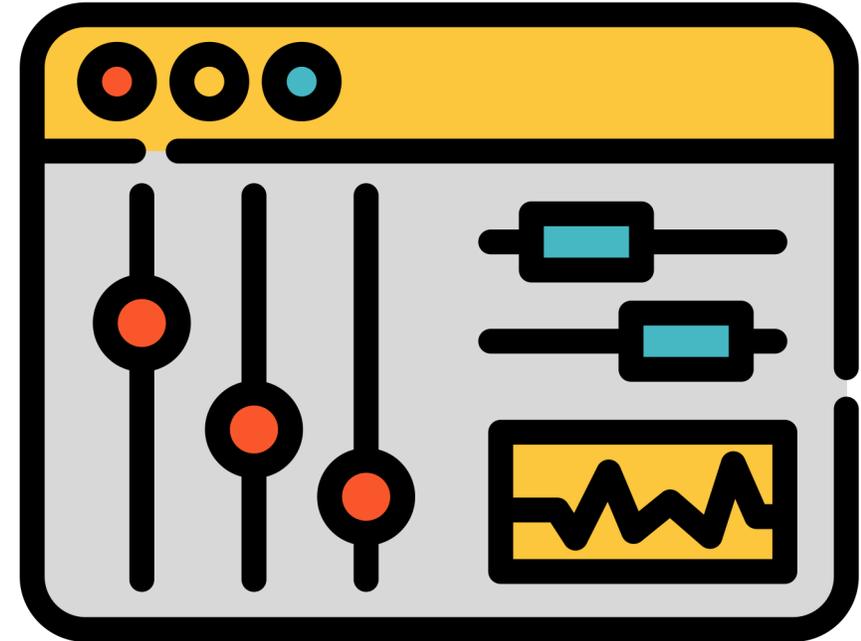
## \*RenewProhibited

This status code indicates that a domain name will not be renewed.

## \*Hold

This status code indicates that a domain is not activated in the DNS.

\* stands for either server or client;  
serverTransferProhibited, clientTransferProhibited, etc.



# Restrictions and Special Cases

For some gTLDs and several ccTLDs, it is common practice to restrict access to their domains by **imposing** specific **requirements** on applicants that wish to register a domain name.

- **Local Presence** – The registrant is required to have a physical presence in the respective country or region of the TLD to register a domain.
- **Additional data** – Depending on the TLD, a registrant is required to additionally provide data, such as an ID card number and date of birth, or a declaration of how the domain name will be used.



Thank you!