Frequently Asked Questions

about

Country code Top Level Domains (ccTLDs)

1. What is a ccTLD?

A country-code top-level domain (ccTLD) is a Top-Level Domain (‘suffix’) that is used to represents a particular country or territory in the Domain Name System (DNS).

cctLDs are normally made up from the connecting dot and two-letter codes assigned to countries and territories in the ISO 3166-1 standard. (e.g. .US)

Please refer to [https://www.iso.org/iso-3166-country-codes.html](https://www.iso.org/iso-3166-country-codes.html) for a full list of the codes.

*In addition, “IDN” ccTLDs are formed from meaningful representations of the name of a country or territory in an official language of the country or territory using non-Latin characters - the country or territory needs to be assigned in the ISO 3166-1 standard.*

2. What does a ccTLD manager do, and who are they?

The ccTLD manager is the organisation that has been designated by the IANA as being responsible for the smooth running of their ccTLD. Most ccTLDs were created before ICANN existed, when IANA was part of the University of Southern California (USC).

ccTLD managers, like gTLD operators maintain a database of registered domains (the information on who has registered and is using domains in their TLD) and is responsible for ensuring the correct technical functioning of the domain in the DNS by the provision and maintenance of ‘authoritative’ name servers.

The ccTLD manager (originally referred to in the InterNIC system as the TLD’s ‘registrant’) for each country or territory is listed at [http://iana.org/domains/root/db](http://iana.org/domains/root/db)
3. What is a ‘delegation’ of a ccTLD?

‘Delegation’ is a technical term-of-art in the Domain Name System. (It refers to the act of inserting so-called “NS” records in the root of the Internet to make the domain function).

However, it has been commonly, and informally used in the past to refer to the act of creating a new TLD.

In order to avoid confusion, ICANN policy recently clarified (2015) the use of the term as follows :-

“Delegation” (section 3 of RFC1591) mean[s] the process by which the IANA Operator initially assigns management responsibility or assigns previously assigned responsibility (after a revocation) for the management of a ccTLD.”  

(Framework of Interpretation of current Policies and guidelines pertaining to the delegation and redelegation of country-code Top Level Domain Names, adopted by the Board on 25 June 2015)

4. What is a ‘redelegation’ of a ccTLD?

Concomitant to the explanation of ‘delegation’ (supra), the term ‘re-delegation’ was also a technical term-of-art and just referred to a change in the NS records in the Internet root zone.

However, it was frequently, and informally used in the past to refer to the act of changing the ccTLD manager (which is unrelated to changes to the root zone). Accordingly, the term is ambiguous.

In order to avoid confusion, the term ‘re-delegation’ has been deprecated in ccTLD policy. It has been replaced by ‘transfer’.
5. What is the process of delegation and redelegation of a ccTLD?

When a ccTLD is first created, a prospective manager must apply to the IANA (now operated by PTI - Public Technical Identifiers).

The applicant must provide the necessary evidence that it fits the criteria set out in RFC 1591 (as construed and interpreted by the Framework of Interpretation) and that it has, or has access to, the necessary technical resources to operate the TLD in a competent manner.

All significantly interested parties must agree that the applicant is the appropriate party to operate the ccTLD. (National governments are automatically regarded as significantly interested parties).

“Significantly Interested Parties” (see Section 3.4 of RFC1591) is defined “to include, but not be limited to: a) the government or territorial authority for the country or territory associated with the ccTLD and b) any other individuals, organizations, companies, associations, educational institutions, or others that have a direct, material, substantial, legitimate and demonstrable interest in the operation of the ccTLD(s) including the incumbent manager. To be considered a Significantly Interested Party, any party other than the manager or the government or territorial authority for the country or territory associated with the ccTLD must demonstrate that it has a direct, material and legitimate interest in the operation of the ccTLD(s)”.

(Section 2.5, FoI).

6. Who is involved in a delegation or redelegation process?

The parties in the initial creation of a ccTLD are the Applicant, the IANA (PTI), any Significantly Interested Parties (including Governments) and the Root Zone Maintainer (currently Verisign Inc.).

In a transfer, the parties are the same, with the addition of the prospective new ccTLD Manager.

(NB: The Root Zone Maintainer might not be involved in a transfer of a ccTLD if the technical parameters of the ccTLD are not changed).
7. What documentation do I need to proceed to a delegation or redelegation of a ccTLD?

The IANA does not have a fixed format for supporting documentation. What is important is to provide the necessary information (including any and all required consents) that is required by the policy.

8. Why are ccTLDs important for governments?

It is trite to state that governments are responsible for public policy in their jurisdictions. Whilst a ccTLD is merely an identifier that allows internet users to show an association the country or territory represented by the two letter ISO code, it can also be regarded as the internet ‘brand’ of the country or territory concerned, the two-letter ISO codes being internationally recognized as a representation of the country or territory.

Accordingly, governments will often find it desirable to have their own sites located under their country code (e.g. www.gov.uk).

9. What is the role of governments in management of a ccTLD?

There are many different models of government participation ranging from very lightweight to direct operational involvement.

There is no formal requirement for a government to be involved in the management of a ccTLD as ccTLDs are a creation of private international law.

However, as governments are responsible for public policy, and ccTLDs can be a significant enable of e-commerce in country or territory concerned, it is natural that government may wish to take a close interest in the how the ccTLD that represents their country or territory is run.

In a few countries, the ccTLD manager is itself a department of government.

10. Is there any legislation or ICANN guidelines or document that prohibits governments or a public institution to be a custodian manager of a ccTLD as long as it is done in the interest of Internet community or Internet users?

No.
11. Who decides how a ccTLD is managed?

The most important factor in how a ccTLD is managed is the principle of subsidiarity.

This means that the management of a ccTLD is almost entirely a local matter, with ICANN and ccNSO policy only governing matters that necessarily require global coordination (e.g., operation of the root zone, policies around creation, transfer and retirement of ccTLDs)

This means that ccTLD managers are free to decide how their ccTLD is managed, in consultation with their Local Internet Community.

This is one of the most significant differences between ccTLDs and gTLDs.

12. What is the role of other stakeholders in ccTLDs?

In the terms of RFC-1591 and the Framework, stakeholders are referred as ‘interested parties’.

Under the principle of subsidiarity (see Section 11, above), this is a local matter.

13. What should a government do if they would like to get involved in the management of their ccTLD?

In the first instance, they should open a friendly dialogue with the ccTLD manager, if one exists.

If a government wants to get involved with the management of their relevant ccTLD, it should establish a working relationship with the current administration. There are many different models of cooperation between government (as a Significantly Interested Party) and the local ccTLD.

It is probably beneficial for all concerned if Governments take an interest and seek to promote a good relationship with the manager of their ccTLD even if they don’t want to be actively involved.
14. Who do I need to contact if I have questions?

1. The local ccTLD manager.
2. The ccNSO and the ICANN Board Members from the ccNSO.
3. ICANN/PTI staff (regarding routine matters).

15. What happens if a government/a local Internet Community wants to transfer a ccTLD and not all parties consent? (i.e. hostile transfer where ccTLD manager objects)?

Disputes regarding the operation of a ccTLD are, at heart, a local matter.

ccTLD policy (RFC 1591) requires that there be an ‘Administrative Contact’ that is located within the jurisdiction of the national government.

Applicable policy (RFC1591) created by IANA in 1994 and subsequently construed in detail by the ccNSO and re-adopted by the ICANN Board in 2015 requires that before an unconsented transfer may take place the existing delegation to the current ccTLD manager must first have been revoked.

For a revocation, the existing ccTLD manager must be objectively shown to have engaged in ‘substantial misbehavior’.

In particular, “the IANA Operator should not step in [to perform an unconsented transfer] regarding issues of equity, justice, honesty, or – except insofar as it compromises the stability and security of the DNS – competency, and that such issues would be better resolved locally” (Section 2.4.6, FoI).

16. What is common and best fit model (for selecting a new operator (ccTLD manager) for the ccTLD to be re-delegated?)

There is no single ‘best’ model that would facilitate a transfer. Every country is different and needs to analyze the situation and apply a model that they see fit.

There are very different existing models adopted by different countries. One successful model is a non-profit entity responsible for the management of the ccTLD with the ultimate supervision of a multi-stakeholder body.
17. From which government office/ministry in a country, point of Contact who have a say in the delegation/re-delegation, is nominated?

Different countries’ governments are organised differently. Whilst some countries have a specific Department or Ministry with responsibility for Information Technology, other countries may have the responsibility in a different Department. This is entirely a local matter for the country concerned.

18. Are there any documents required to describe how existing ccTLD operations will be transferred to the proposed new operator, in the case of a re-delegation?

In the case of any transfer the IANA would expect the two parties to liaise and produce a comprehensive plan for the handover.

19. Can we say that availability of suitable infrastructure is mandatory for the smooth functioning of ccTLD?

“The major concern in selecting a designated manager for a domain is that it be able to carry out the necessary responsibilities, and have the ability to do an equitable, just, honest, and competent job.” (RFC1591, Section 3).

If a ccTLD manager carries out all its functions in-house, then it must have access to the necessary facilities. It does not have to provide all these facilities itself. A number of ‘backend’ registry operating companies now exist that can provide suitable infrastructure, so that whilst such infrastructure is certainly needed, it may be sourced elsewhere.

20. Is there any documentation required to show that new operator will operate the domain in a fair and equitable manner in case of delegation and re-delegation of ccTLD?

The IANA will need to be satisfied that the proposed manager possesses the necessary technical administrative and operational skills, judged by the standard of the ordinarily competent ccTLD manager (section 3.5 of RFC1591).

The prospective manager should demonstrate that it possesses the requisite skills to carry out the duties of a manager (skills test); and (ii) if designated, will have the means necessary to carry out those duties (including the ongoing responsibilities discussed above), upon receiving the appointment (executory preparedness test). (FOI, Section 2.10)
21. Is there any formal form/template that needs to be completed as per IANA SOP [7] for delegation / re-delegation and what information is required to fill-in this template?

IANA has a standard template for use in routine transfers. (This template would not be useful in the case of allegations of substantial misbehavior - a formal and final decision on revocation would be necessary before submission of such a template would be appropriate).

22. What type of information is required to show that the change (from existing operator to new operator) serves the local interest in the country?

It would be helpful for the IANA to receive communications from interested and Significantly Interested Parties (including but not limited to Governments) supporting any proposed transfer.