

What's in a name?

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The domain name has become a part of life. Appearing everywhere from advertisements to business cards, strings of words and dots have become ubiquitous. 'dot com' is now part of everyday vocabulary – the explosive growth of 'dot com' businesses resulted in the 'dot com' boom and so on. The relatively painless growth the domain name system (DNS) has experienced over the last twenty years is testament to the foresight of those who put the structure in place originally.

In 1973, the numerical addressing system which underpins today's Internet was put in place. This worked perfectly well on a small scale, but before long it became unmanageable since numerical IP addresses (such as 143.206.18.205) are not easy to remember. Initially, the problem was solved by maintaining a list of names on each computer on the network with the corresponding numerical addresses alongside. This allowed users to refer to computers using meaningful names which were automatically translated into their numerical equivalent. At regular intervals, new versions of this name table were distributed to all computers on the network.

In 1981, a paper was produced which claimed that 'In the long run, it will not be practicable for every Internet host to include all Internet hosts in its name-address tables', citing the fact that it was already becoming difficult to manage with four hundred entries. It was suggested that the replacement mechanism proposed could, if necessary, support a network of over a thousand computers. Today there are over 48 million domain names registered under '.com' alone and DNS is still going strong.

'.com' is an example of a top-level domain under which other domains can be registered. Top-level domains fall into two categories: Generic Top Level Domains (gTLDs), which loosely represent functional groups such as commerce (.com) and education (.edu), and Country Code Top-Level Domains (ccTLDs) which relate to particular jurisdictions.

Jon Postel started the ccTLD structure, and he chose the existing ISO3166 standard as a starting point. The first ccTLD registered was '.us' – United States – which was registered on 15 March 1985. This was quickly followed by '.uk', United Kingdom, immediately upsetting the plan since the ISO3166 entry is actually '.gb'. Next was Israel, followed by numerous countries across Europe and Asia in 1986.

gTLDs are predominantly overseen by ICANN - the Internet Corporation for Assigned Names and Numbers, who currently delegate management of the lucrative '.com' domain name to Verisign. Management of ccTLDs (such as '.im') vary by country, as do the rules and fees applied. Fortuitously for the countries involved, some domain names such as '.tv' have a meaning additional to their original purpose, resulting in a vastly more registrations than would be expected otherwise. Tuvalu has 9,000 inhabitants spread across nine tiny islands, has an annual budget of \$4m, and relied mainly on fishing before 500,000 '.tv' domains came along at

\$50 per year. It's a similar story in Tonga with '.to', Turkmenistan with '.tm', and Niue with '.nu' – meaning, among other things, 'naked' in French.

This exploitation of the domain name structure purely for commercial gain is a subject of fervent debate. What jurisdictions originally considered purely as a technical notation is now recognized as a component of their sovereignty and a vital national interest. In many cases, this has resulted in legal challenge and dispute as governments try to ensure that their domains are managed within a structure with which they are comfortable. There have been several occasions where domains have been forcibly wrestled back from incumbent managers resulting in technical instability and disruption. The commercial consequences of the resulting failure of the domains in question is immeasurable.

There is an uneasy balance to be struck here. On the one hand, the experimental and largely self-governing approach of technologies has been instrumental in the development of the Internet to date. On the other, the stability of the domain name system now underpins a significant slice of the economy.

The Isle of Man domain has been operated relatively conservatively since its inception in the mid-1990s. While other domains were opening their doors to all-and-sundry, a cautious approach to regulation of '.im' has allowed best practice to develop and valuable lessons to be learnt from jurisdictions who acted a little more hastily. With the benefits of hindsight, Treasury has now elected to relax the rules regarding registration while maintaining the degree of control required to prevent damage to the Island's reputation. This, coupled with the development of a modern automated registration process, is sure to reinforce our reputation as a leading e-commerce jurisdiction. The new registration process is scheduled to be available in the next few months.