W3C (The World Wide Web Consortium)

is an international public-interest non-profit organization where Member organizations, a full-time staff, and the public work together to develop Web standards. Founded by Web inventor Tim Berners-Lee and led by President & CEO Seth Dobbs and a Board of Directors, the Web Consortium's mission is to lead the web to its full potential. Members include businesses, nonprofit organizations, universities, governmental entities, and individuals.

W3C's history

Web inventor Tim Berners-Lee founded the World Wide Web Consortium in 1994 to ensure the long-term growth of the Web. He remains W3C's Emeritus Director and Honorary Member of the Board of Directors. From the start, the World Wide Web Consortium (W3C) has been an international multi-stakeholder community where member organizations, a full-time staff, and the public work together to develop open web standards.

In 2012 and 2013, the W3C started considering adding DRM (Digital Rights Management)-specific Encrypted Media Extensions (EME) to HTML5, which was criticised as being against the openness, interoperability, and vendor neutrality that distinguished websites built using only W3C standards from those requiring proprietary plug-ins like Flash. On 18 September 2017, the W3C published the EME specification as a recommendation, leading to the Electronic Frontier Foundation's resignation from W3C. As feared by the opponents of EME, as of 2020, none of the widely used Content Decryption Modules used with EME are available for licensing without a per-browser licensing fee.

DNS

The Domain Name System (DNS) is a hierarchical and distributed name service that provides a naming system for computers, services, and other resources on the Internet or other Internet Protocol (IP) networks. It associates various information with domain names (identification strings) assigned to each of the associated entities. Most prominently, it translates readily memorized domain names to the numerical IP addresses needed for locating and identifying computer services and devices with the underlying network protocols. The Domain Name System has been an essential component of the functionality of the Internet since 1985.

The DNS root zone is the top-level DNS zone in the hierarchical namespace of the Domain Name System (DNS) of the Internet.

Before October 1, 2016, the root zone had been overseen by ICANN which delegates the management to a subsidiary acting as the Internet Assigned Numbers Authority (IANA). Distribution services are provided by Verisign. Prior to this, ICANN performed management responsibility under oversight of the National Telecommunications and Information Administration (NTIA), an agency of the United States Department of Commerce. Oversight responsibility transitioned to the global stakeholder community represented within ICANN's governance structures.

ICANN (The **Internet Corporation for Assigned Names and Numbers)**

Before the establishment of ICANN, IANA {Internet Assigned Numbers Authority) functioned to administering registries of Internet protocol identifiers (including the distributing top-level domains and IP addresses.) This was performed by Jon Postel, a computer science researcher who had been involved in the creation of ARPANET, first at UCLA. In 1997 Postel testified before Congress that this had come about as a "side task" to this research work. The Information Sciences Institute was funded by the U.S. Department of Defense.

As the Internet grew and expanded globally, the U.S. Department of Commerce initiated a process to establish a new organization to perform the IANA functions. ICANN was the result.

ICANN describes it's primary principles of operation as "helping preserve the operational stability of the Internet; promoting competition; achieving broad representation of the global Internet community; and developing policies appropriate to its mission through bottom-up, consensus-based processes.