

Even the Dial-up Internet Users , temp. IP Address Owners Deserve an FQDN Address

--Short Paper and a Request for Comment--

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Abstract: It is Common knowledge that a DNS name is always granted to the select few who own or procure permanent IP address. We say “a Select few” because plenty of surveys have shown that the ratio of nodes with temporary address on the Internet to that of the stations with permanent address is whopping-ly high. Here let us re-clarify that servers with permanent IP address are registered in the DNS hierarchy with some FQDN like <http://abc.xyz.com>. The protocol “http” taken as an example here could be any other protocol like ftp. or mms. etc . The unfortunate lot who log on to Internet to reap the services offered, maybe, for a few hours are the ones who arrive to the Internet arena thru some ISP and are temporarily provided an IP address. They do not have permanent Ip since they have not paid for that again since they might not require a permanent presence on Internet. But , the point we are making is that it is slowly turning into a myth that these unfortunate lot do not require a DNS name. We shall cite a few examples of such requirements, which the majority of temporary Intrenet users are feeling to have and the number is growing with the penetration of Internet-enabled education in society. [The Journal of American Science. 2006;2(1):54-55].

Keywords: dial-up; DNS; Internet; IP; ISP

Cases

A media lover would like his friends and his forum-partners to watch his documemntaries that he shoots regularly and edits afterwards. He would like to place his media on his computer. He logs on using his Broadband thru predetermined hours and turns on the media encoder and services. His so many acquaintances could watch the stream using an URL, from any corner of the world, but which URL ?? . His IP address is going to change every day or could be every half ‘n hour if the connection so graces. He could go for a permanent Ip address and a Proper DNS registration, but he does not want to make a career out of this. This is just for the time being till he cultures another hobby. Morover he does not have such persistent requirement to shelve out the necessary extra money and bear the inconvenience of extra correspondence and a long wait.

A person might want to host his own FTP server from his house thru his Dial-up connection for others to download light pic and doc files. It would be very convinient if his FQDN would remain ftp://david_r.vsnl.com rather than accessing his domestic site using a different Ip address every day.

A Lady would love to host her own domestic WebSite , where every day at 5:00 pm she illustrates some new gastronomic preparation. She wants her audience to access her page thru <http://sheila1972@sify.com> rather that dole out her new ip address every day to a 150 odd viewers.

These are a few instances which exhibit the requirement of such a mechanism, that could keep the DNS name static, though the ip address will change regularly. There is similar mechanism that is followed in LANs especially those which house Microsoft platforms called DHCP-DNS integration but the exact methodology would be unsuitable for the Internet-ISP scenario.

This paper strives to find and suggest a solution where evry ISP dialup user or Braodband customer could receive a permanent DNS name on request, a name which shall be housed primarily on the ISP’s DNS servers , a name with extension of the ISP’s DNS name and which could be accessed from the world over. The solution lies in changing or rather upgrading the present DHCP, DNS and to some extent PPP algorithms, a little bit. The paper also digresses into discussing the pros and cons of such a mechanism. Because we sincerely believe there is a tremendous need of this facility and convenience, out there !!!

It is my desire to have an honest feedback from the Internet Community on this humble work.

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References

1. Mukherjee I. Design Methodologies For Bit Distributed Computer Resource System Advances In Modelling & Analysis, Paris, 1994.
2. Mukherjee I. Design of a Concentrator Based Network Int. Educomp, Chandigarh ,TTI, 1995.
3. Design and Development of a Software lock system" CTCISIS Int. Conference,Amman, Jordan ,1996.
4. Mukherjee I. Introduction to PC Softwares - Academic India Publishers, New Delhi,1995.
5. Mukherjee I. Chapter on I.C.G. in Elements of Computer Science IEEE (AMIE) Narosa House Publ., 1996.
6. Mukherjee I. Beginner's Assembly Language & Hardware for the IBM PC Series, New Central Book Agencies, Calcutta, 1998.