

# DNS cache and hosts file ignored

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*Source:*

[http://www.tech-archive.net/Archive/WinXP/microsoft.public.windowsxp.network\\_web/2006-06/msg00055.html](http://www.tech-archive.net/Archive/WinXP/microsoft.public.windowsxp.network_web/2006-06/msg00055.html)

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Hello everyone,

I have a nice new installation of Window XP Pro 64. SP 1 (v2003). My problem can be stated rather simply as: My hosts file is being completely ignored by the DNS client.

The Hosts file is valid (name and content) and located in the correct folders. The registry settings are correctly set to find the hosts file. I have read the tech manuals on Microsofts web site looking for any hidden gotchas. Nothing strange there, and indeed they reflect my understand of how my domain names should be resolved

Here are some links to the resource I have been using

<http://www.microsoft.com/technet/itsolutions/network/deploy/depovg/tcpip2k.mspx>  
[http://www.microsoft.com/technet/itsolutions/network/evaluate/technol/tcpipfund/tcpipfund\\_ch07.mspx](http://www.microsoft.com/technet/itsolutions/network/evaluate/technol/tcpipfund/tcpipfund_ch07.mspx)

Right, so now I will draw your attention to the following text from the above resource (give or take some typos):

This file maps host names to IP addresses. For TCP/IP for Windows XP and Windows Server 2003, the contents of the Hosts file are loaded into the DNS client resolver cache.

And then then a little further down some comments about the dns client resolver are made, which I have summerised/hacked out as follows:

## The DNS Client Resolver Cache

The DNS client resolver cache stores entries for both successful and unsuccessful DNS name resolutions.

- \* The contents of the cache are built dynamically from the Hosts file and from DNS queries.
- \* DNS query entries are kept only for the Time to Live (TTL) period.
- \* Hosts file entries do not have a TTL and are kept until the entry is

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removed from the Hosts file.

The `ipconfig /displaydns` command can be used to view the contents of the DNS client resolver cache and `ipconfig /flushdns` flushes the cache and refreshes the DNS client resolver cache with just the entries in the Hosts file.

The documentation is quite clear. I flushed the cache and then listed the contents on the 64 bit PC. The cache was empty. I did the same thing on another machine, and their the cache contained the hosts file, as promised.

After some more googling I came across a wikipedia entry which stated the following (give or take a few edits):

Windows XP SP2, and perhaps other versions, appears to ignore the hosts file if the "DNS Client" service is running. One workaround is to stop the DNS Cache service. To preserve this setting across reboots ensure that the service is reconfigured to start manually. (Being a good sport, I added some text to the entry)

The strange thing is that the 2nd machine I tested on, is an XP SP2 installation... Further, when I turn off this service as suggested, my hosts file works as expected.

So the question is what is going on here? Is this a bug? Or am I missing some magic settings that will make dns caching read the hosts file as promised in the docs?

When I searched the forum for similar topics I read that some one had the reverse problem. i.e. when the cache was turned off resolving failed. Which make sense to me... go figure.

Any ideas?

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