

# Re: Active Directory Integrated DNS-DHCP -> DHCP computers with Pen Ic

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*Source:*

<http://www.tech-archive.net/Archive/Windows/microsoft.public.windows.server.dns/2009-04/msg00162.html>

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In [news:FE929CD9-E492-4E71-81AA-CA03E0695F5F@xxxxxxxxxxxxxxxxx](mailto:news:FE929CD9-E492-4E71-81AA-CA03E0695F5F@xxxxxxxxxxxxxxxxx), Kashif <[Kashif@xxxxxxxxxxxxxxxxxxxxxxxxxxxxx](mailto:Kashif@xxxxxxxxxxxxxxxxxxxxxxxxxxxxx)>, seeking assistance, posted the following:

I have computer that gets DHCP lease with Pen ICON.  
According to Technet:  
<http://technet.microsoft.com/en-us/library/cc784812.aspx>  
Active Lease, DNS dynamic update pending. This address is not available for lease by the DHCP server.

DHCP properties:

DNS TAB

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Checked -> Enable DNS dynamic updates according to the settings below  
Radio Button enable -> Dynamically update DNS A and PTR records only if requested by the DHCP client.

Checked -> Discard A and PTR records when lease is deleted

General TAB

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Checked -> Enable DHCP audit logging

Lease duration for DHCP clients:

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1 Days 0 Hours and 0 minutes

Scope Options:

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003 Router configured for Firewall LAN IP address  
006 DNS Servers configured for DC1 and DC2 IP address  
015 DNS Domain Name configured MyDomain.com

Thank you for all the HELP!!!

Take a read on the following link. Click on the DHCP Icon references It means that a DNS update is pending.

DHCP Tech Reference:

<http://technet.microsoft.com/en-us/library/cc781580.aspx>

It may mean that if it is stuck on the pencil icon, it means it cannot update the record in DNS because it already exists and DHCP server does not own the record, the client machine does, and therefore the DHCP server cannot update the record. One way to get around that is to force DHCP to own the record, but there are few steps you need to perform to enable this feature, as well as set scavenging options. Read the following for a how-to.

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DHCP, Dynamic DNS Updates , Scavenging, static entries & timestamps, and the DnsProxyUpdate Group:

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The entity that registers it owns the record. The nice thing about DHCP owning the record is it will update it if DHCP gives the machine a new IP. Otherwise you'll see multiples of the same in DNS whether scavenging is enabled or not. I would force DHCP to own the record as well as enable scavenging to keep it clean. To force DHCP to own the record, you will need to do the following:

1. Add the DHCP server to the DnsUpdateProxy Group.
  2. Force DHCP to register all records, Forward and PTR, (whether a client machine can do it or not) in the Option 081 tab (DHCP properties, DNS tab).
  3. Set Option 015 to the AD domain name (such as example.com).
  4. Set Option 006 to only the internal DNS servers.
  5. If the zone is set for Secure Updates Only, then DHCP cannot update non-Microsoft clients and Microsoft clients that are not joined to the domain. In this case, you will need to create and configure a user account for use as credentials for DHCP to register such clients.
- If your DHCP servers are Windows 2003 or Windows 2008, Configure a dedicated the user account you created as credentials in DHCP by going into DHCP CONsole, DHCP server properties, and on the Advanced tab of the DHCP Server Properties sheet click the Credentials button, and provide this account info. The user account does not need any elevated rights, a normal user account is fine, however I recommend using a Strong non-expiring password on the account.

Once you implement scavenging, you will need to wait at least a week for it to take effect. You can quicken it up by manually deleting the incorrect records to get started.

But more importantly, if DHCP is on a DC, it will not overwrite the original host record for a machine getting a new lease with an IP formerly belonging to another. To overcome this, add the DHCP server (the DC) to the DnsProxyUpdate group. This will force DHCP to own all records it will create moving forward and will update an IP with a new name in DNS.

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If you set this, but when a record shows up in the DHCP Lease list with a pen (which means that a write is pending), it may mean it is trying to register into a zone that does not exist on the DNS servers. This happens in cases where the client machine is not joined to the domain and has a missing or different suffix than the zone in DNS. It can only register into a zone that exists on DNS and that zone updates have been configured to allow updates. If this is the case, go into the client machine's IP properties, and on the DNS tab in TCP/IP properties, clear the "Register this connection's addresses in DNS" as well as the "Use this connection's DNS suffix in DNS registration" check boxes, the DHCP Server will fill these in for you and register using the domain name in Option 015.

Concerning records and timestamps, and lack of timestamps:

If the record was manually created, it won't show a time stamp, however, if the record was dynamically registered, it will show a time stamp. My guess is the records you are referring to were manually created. If you manually create a record, the checkbox will not be checked to scavenge, however if it was dynamically registered, it will be checked. I just tested this with Windows 2003 DNS. When I had built a few servers for a customer and let them auto register, they had a timestamp and the scavenge checkbox was checked. For the records I manually created, such as internal www records, and others, they did not have a time stamp and were not checked to scavenge.

Even if you allow auto registration, which I do by default, and it gets scavenged, it gets re-registered anyway by the OS. Unless you are seeing something going on that is affecting your environment, the default settings work fine, at least they do for me for all of my customers and installations I've worked in that I've set scavenging and forced DHCP to own the records so it can update the records it had registered at lease refresh time.

The following links provide additional information on how it all works.

How to configure DNS dynamic updates in Windows Server 2003.

<http://support.microsoft.com/kb/816592>

Using DNS Aging and Scavenging Aging and scavenging of stale resource records are features of Domain Name System (DNS) that are available when you deploy your server with primary zones.

<http://technet.microsoft.com/en-us/library/cc757041.aspx>

Microsoft Enterprise Networking Team : Don't be afraid of DNS ...Mar 19, 2008 ... DNS Scavenging is a great answer to a problem that has been nagging everyone since RFC 2136 came out way back in 1997.

<http://blogs.technet.com/networking/archive/2008/03/19/don-t-be-afraid-of-dns-scavenging-just-be-patient.aspx>

DHCP, DNS and the DNSUpdateProxy–Group – Directory Services/Active ...I had a discussion in the Newsgroups lately about DHCP and the DNSUpdateProxy–Group which is used to write unsecured DNS–Entries to a DNS–Zone which only ...

<http://msmvps.com/ulfbsimonweidner/archive/2004/11/15/19325.aspx>

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And from Kevin Goodnecht:

Setting up DHCP for DNS registrations

[http://support.wftx.us/setting\\_up\\_dhcp\\_for\\_dns\\_registra.htm](http://support.wftx.us/setting_up_dhcp_for_dns_registra.htm)

317590 – HOW TO Configure DNS Dynamic Update in Windows 2000 and DNSUpdateProxy Group:

<http://support.microsoft.com/?id=317590>

816592 – How to configure DNS dynamic updates in Windows Server 2003:

<http://support.microsoft.com/kb/816592/>

Follow up discussion on the DNSUpdateProxy-Group:

<http://msmvps.com/ulfbsimonweidner/archive/2005/03/26/39841.aspx>

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Ace

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For urgent issues, you may want to contact Microsoft PSS directly. Please check <http://support.microsoft.com> for regional support phone numbers.

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