

RE: Registry explanation of ghosted network adapters

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I figured out where the {ID} comes from:

all the TCP/IP parameters are registry values that are located under one of two different subkeys of HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Tcpip\Parameters

Tcpip\Parameters\Interfaces\ID for Adapter

Note ID for Adapter is the network adapter that TCP/IP is bound to. To determine the relationship between an Adapter ID and a network connection, view

HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\Network\{4D36E972-E325-11CE-BFC1-08002

for Adapter>\Connection. The Name value in these keys provides the friendly name for a network connection that is used in the Network Connections folder.

Values under these keys are specific to each adapter. Parameters that have a DHCP configured value and a statically configured value may or may not exist.

Their existence depends on whether the computer or the adapter is DHCP configured and whether static override values are specified. You must restart the computer for a change to take effect.

It appears that each individual network adapter has a unique PNPInstanceID and that's what is causing the unique {ID}.

"Troy" wrote:

I have a question about how the server 2003 registry differentiates multiple network adapters within a system.

I have server "a" that has multiple NICs in it. All NICs are defined with static IP addresses and these IP properties are stored within HKLM\system\currentcontrolset\services\{ID}. How is this {ID} generated and does it follow any rules, for instance a hash of the MAC address?

The reason I ask is because server "a" is configured now with a NIC with MAC address 1 for example. I have a cold spare server (b) that works fine when booted with server "a"'s OS image except I receive the adapter ghosting issue (MS article 269155) when I try to configure the IP address for the new MAC address 2 NIC. All I have to do is re-enter the IP address and answer No to

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this question, "Do you want to enter a different IP address for this adapter in the list of IP addresses in the advanced dialog box?" to resolve the issue – I do not have to remove the ghost adapter from the registry because I want the ghost adapter to be there in case I have to reuse server "a" with the same OS image. So if I move the OS image back to server "a" with NIC/MAC 1 the registry will pick up the static IP settings again from the registry and be happy right?

So in effect I have to configure/run each OS installation on server "a" to have the IP registry settings written but I also have to have that OS installation run on server "b" to to have the IP registry settings written so that I do not run into an issue in the future when the cold spare is put in use? Is this correct?