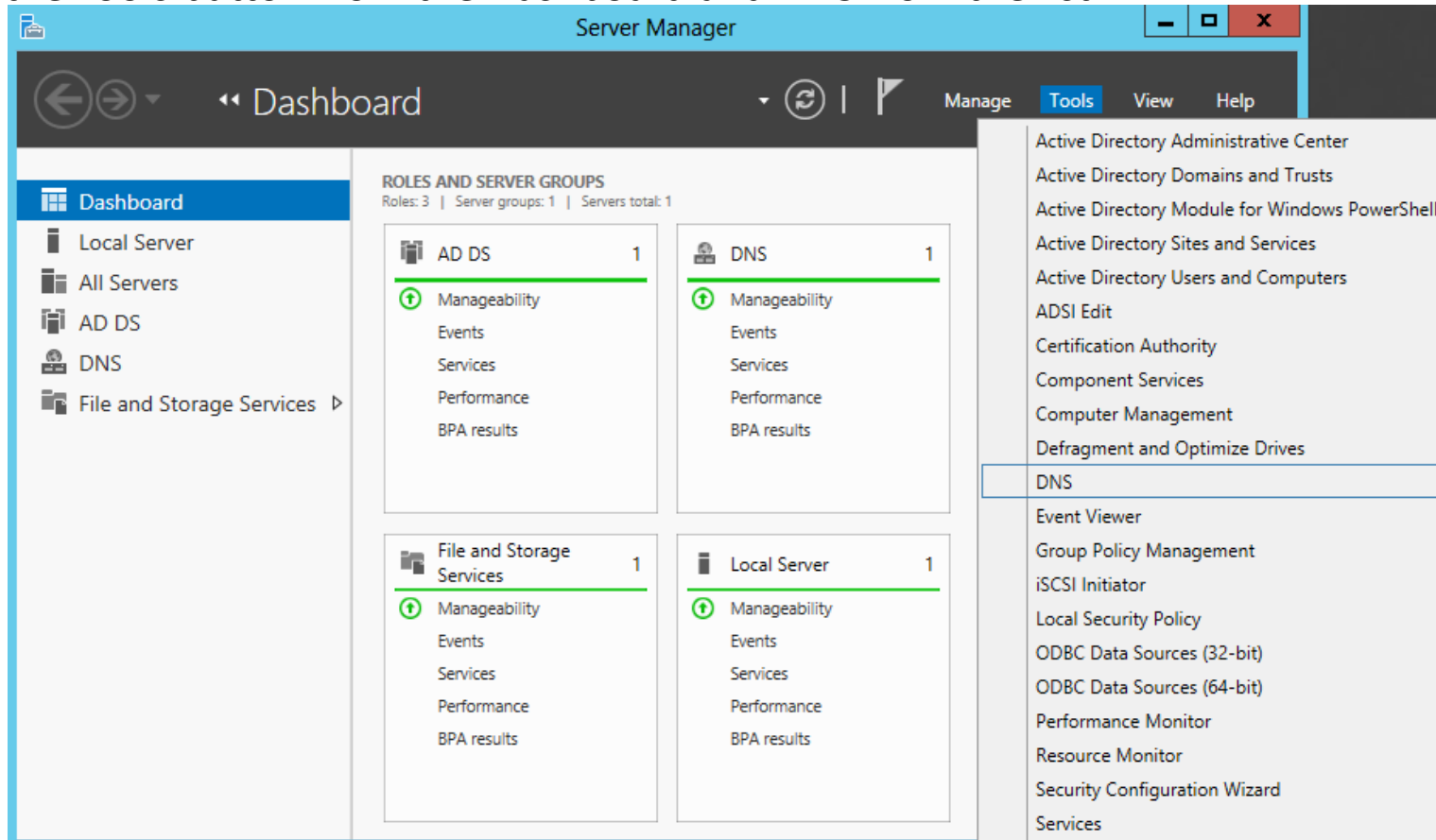# DNS for Active Directory

June 18, 2013

# Setup Security Policies

To modify the DNS settings on a Domain Controller on the Windows 2012 Standard Server, we select the Server Manager icon form the Task Bar. Then we pick the Tools button from the Dashboard and DNS from the list.
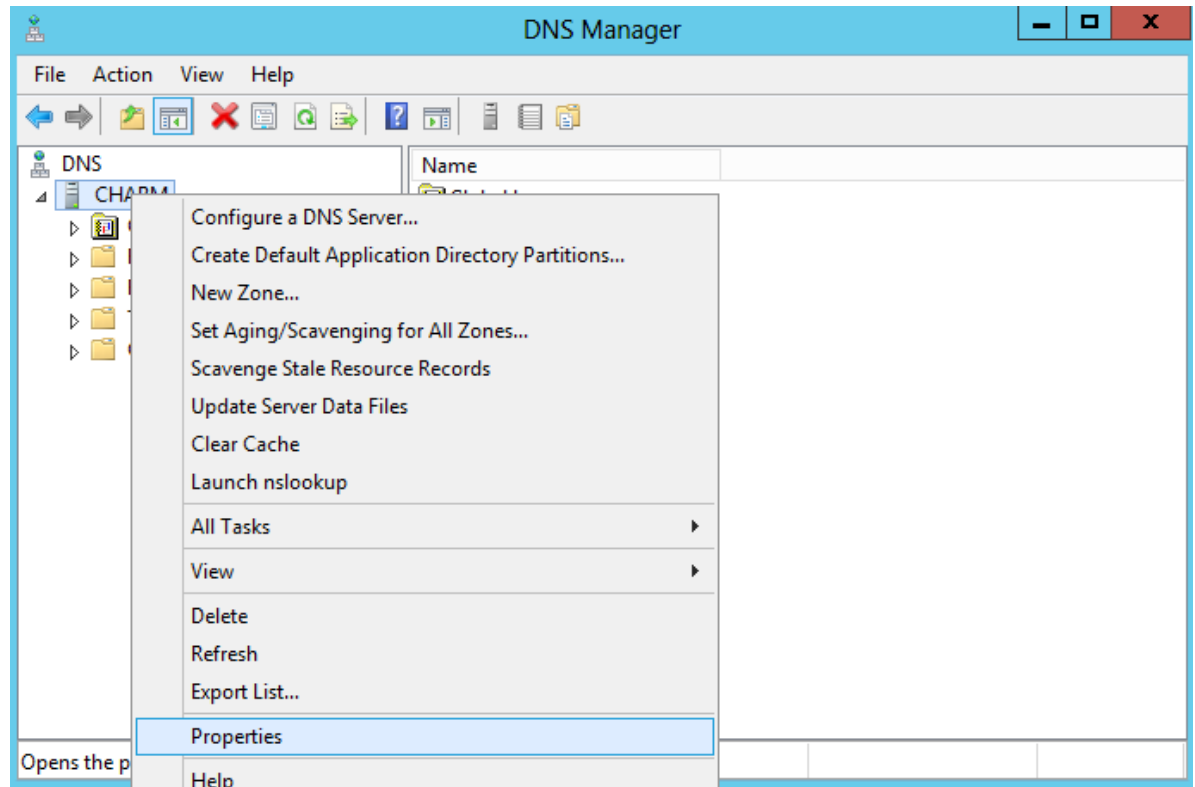
# DNS Server Properties

To open the DNS Properties window, and to access and make changes to our DNS server, we right click on the DNS Server name and select Properties from the popup menu.

# Interfaces Tab

One of the new features in Windows Server 2012 is that the DNS server supports both IPv4 and IPv6. Presently, in our setup the server is listening on the External NIC to resolve DNS requests. This openness can be exploited by hackers, so we might want to just listen on the 192.168.20.235 for request from our clients.

To change the listening to just 192.168.20.235, we opt for the second radial button and we uncheck the IPv6 interface.
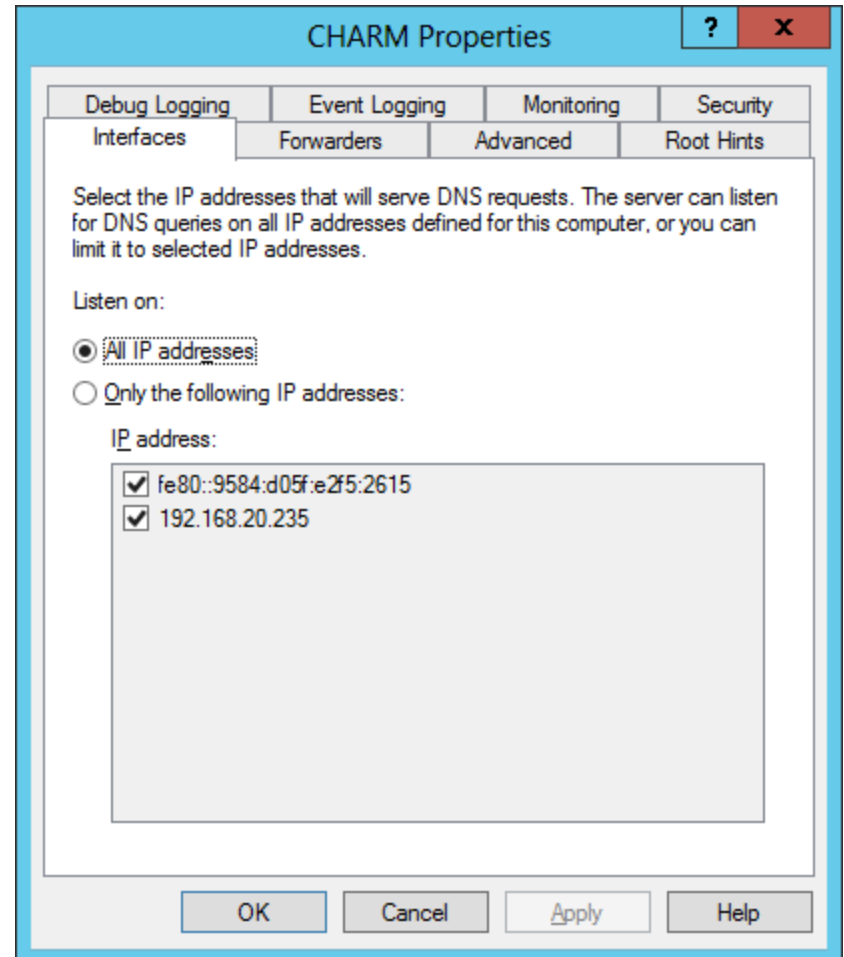
# The Forwarders Tab

The Forwarders tab shows the servers that resolve DNS request from our DNS server. We should add nameservers that will resolve DNS requests. There should be a minimum of two forwarders since Active Directory relies on DNS servers to operate.

For home networks that do not have static IP addresses and do not have primary and secondary IP addresses assigned by the ISP, we can use two DNS servers provided by Google.com for public DNS resolution. They are 8.8.8.8 and 8.8.4.4.
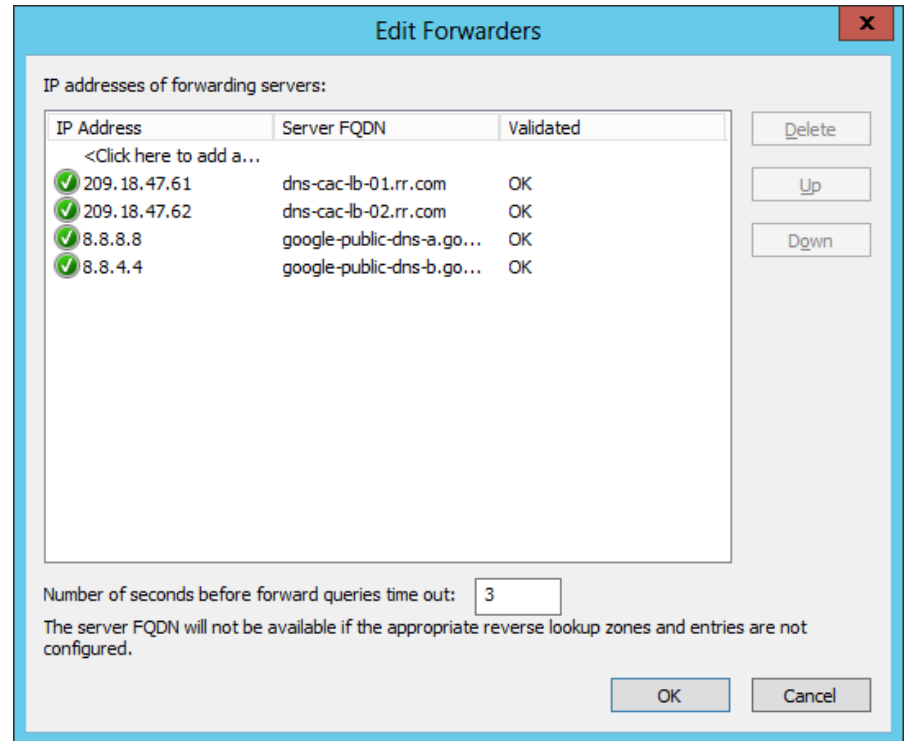
To add DNS servers, press the Edit button.
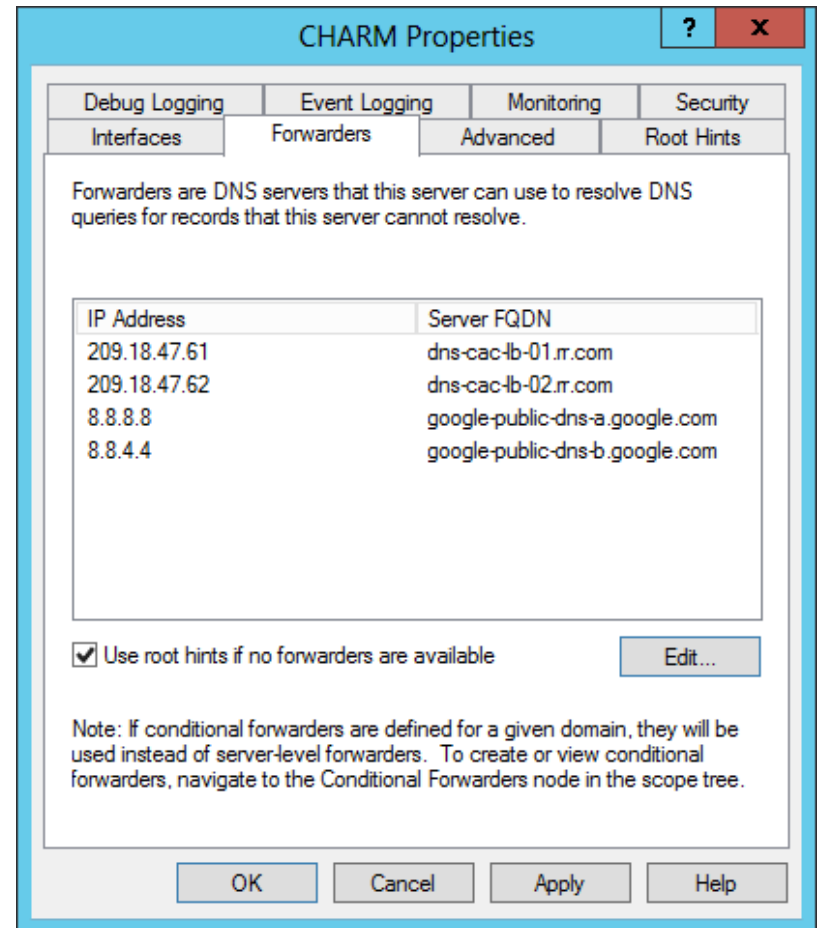
# Edit Forwarders

To add a DNS server to the list, we type the IP address in the click to add an IP address area. Once the IP address is typed, then it is validated. All answering DNS servers receive a green check circle.

To return to the Forwarders tab, we should press the OK button.

# Advanced Tab

The Advanced tab will allow us to view the server options. We will not change any settings at this time.

If we check the disable recursion this will disable communication to the forwarders, so if the 13 Root Hint servers or our local DNS server does not have the IP address for a domain name then the client's request will fail.
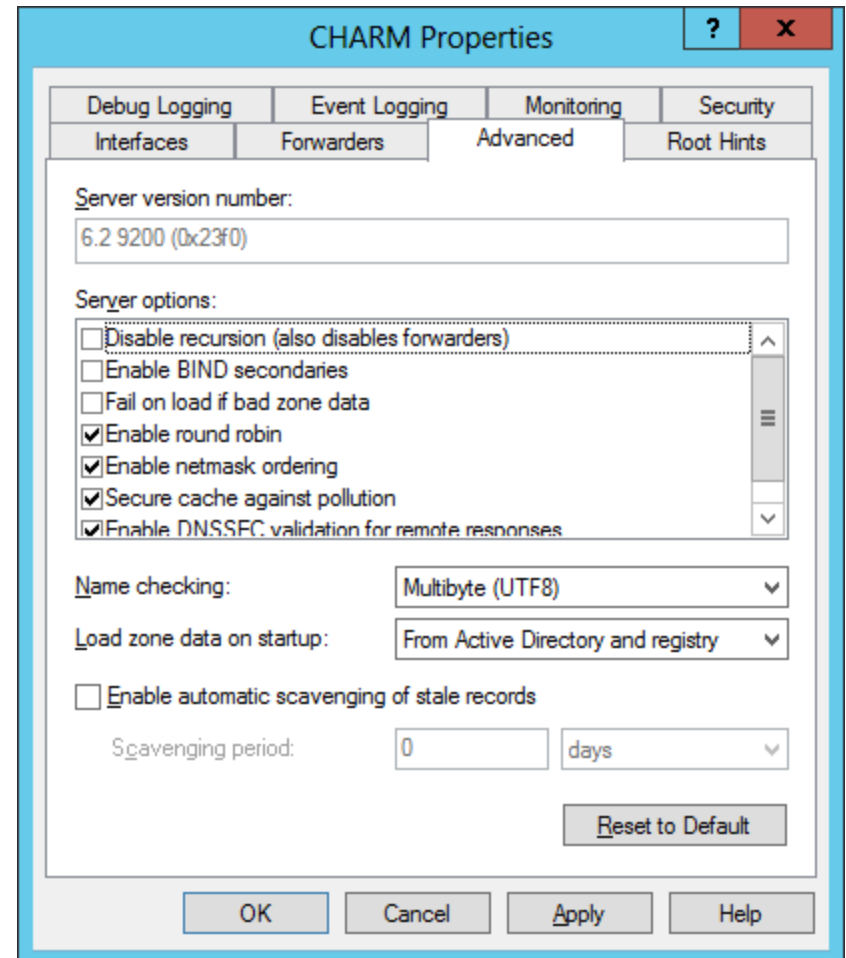
# Root Hint Servers

There are 13 Root Hint on the Internet and they are represented when the local DNS server was loaded. We can resolve an IP address by selecting Edit and at the Edit Name Server Record window we can type a domain name such as www.google.com and select the Resolve button.
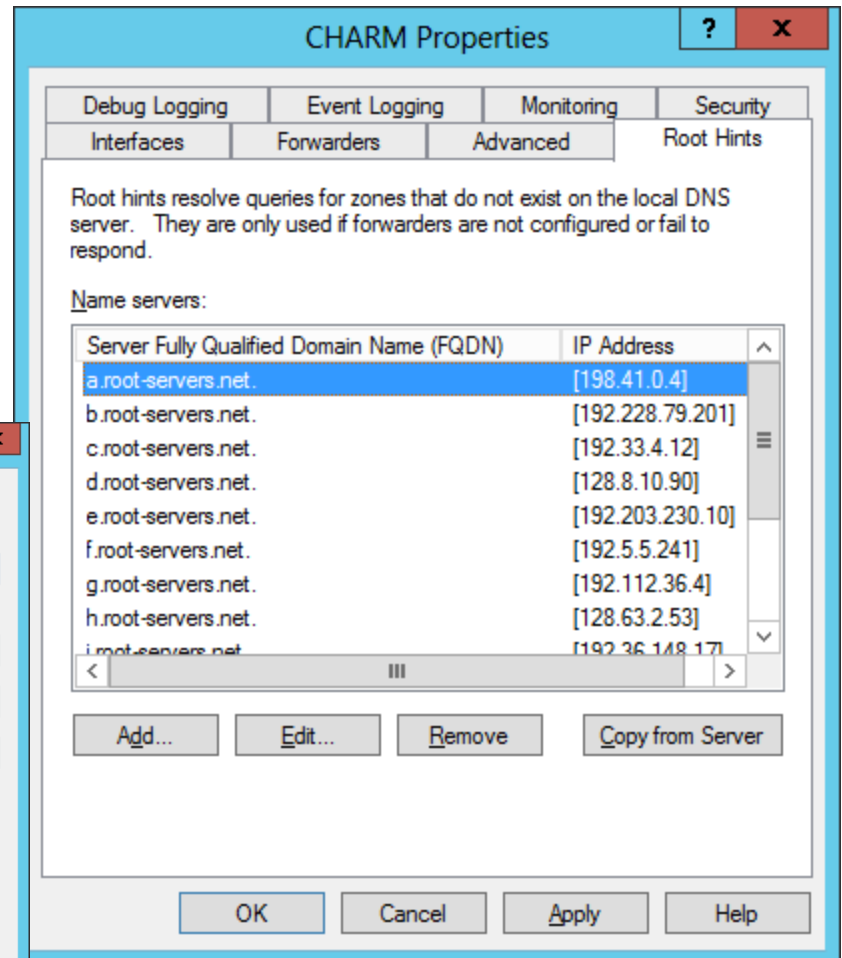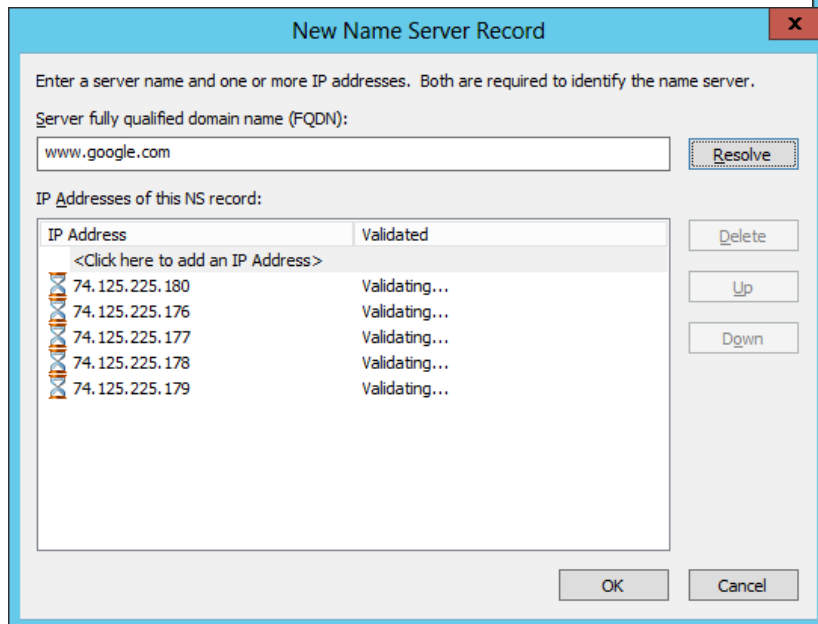
# Security Tab

The security tab will allow us to set the permissions for access and control of the DNS server. Presently, the administrators can change the DNS Server settings. We press the Apply button and close the DNS Server properties window.
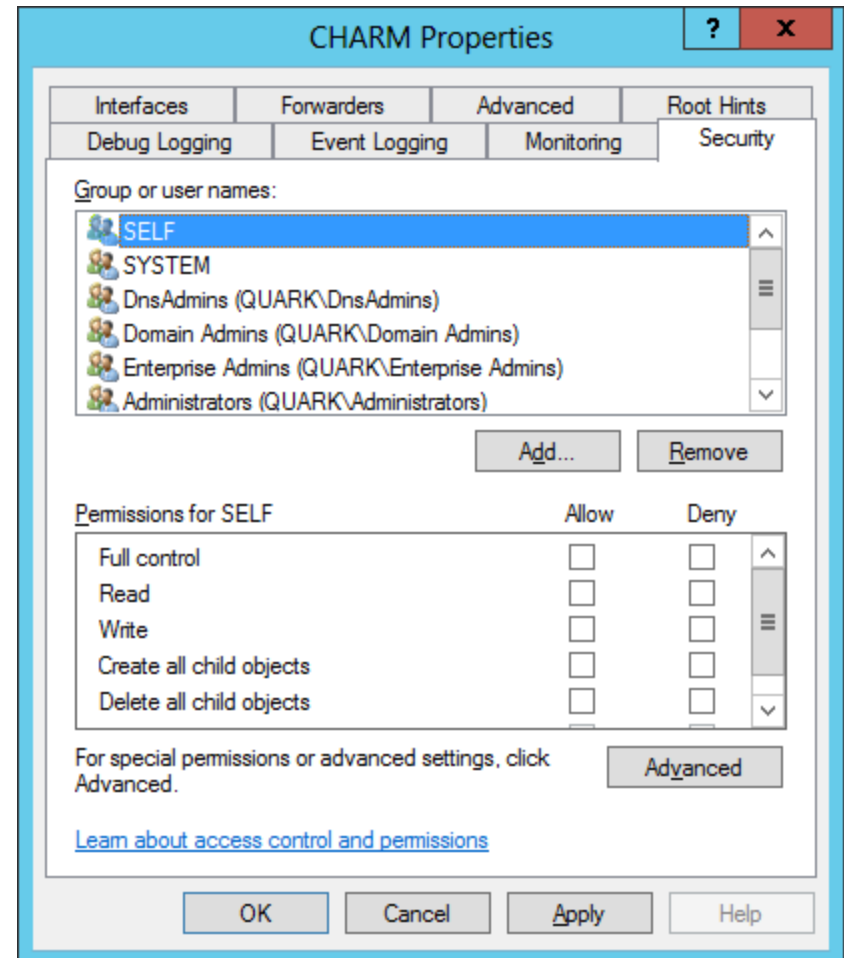
# Monitoring Tab

The Monitoring Tab will tell us if our DNS server is resolving requests.

We check the simple query against the DNS server and a recursive query to other DNS servers checkboxes. We then press the Test Now button and both tests should pass. We can set the interval for the test to whatever seconds, minutes or hours we wish.
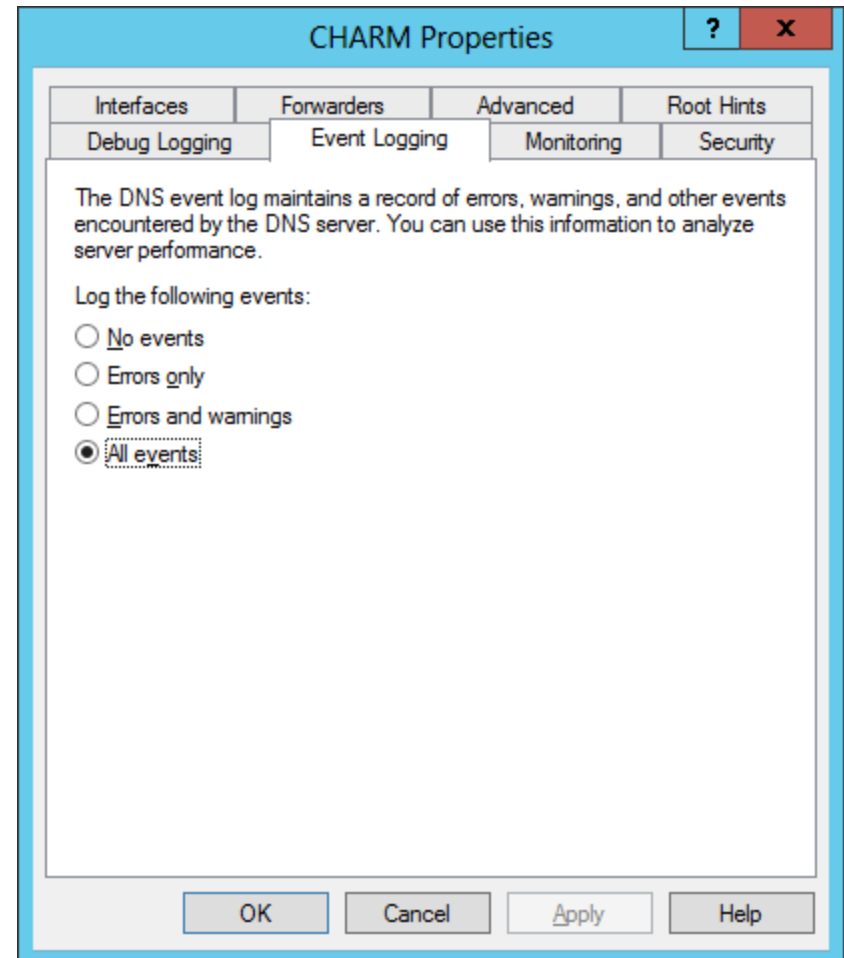
A simple query checks our server and a recursive query checks the link to forwarders DNS server.
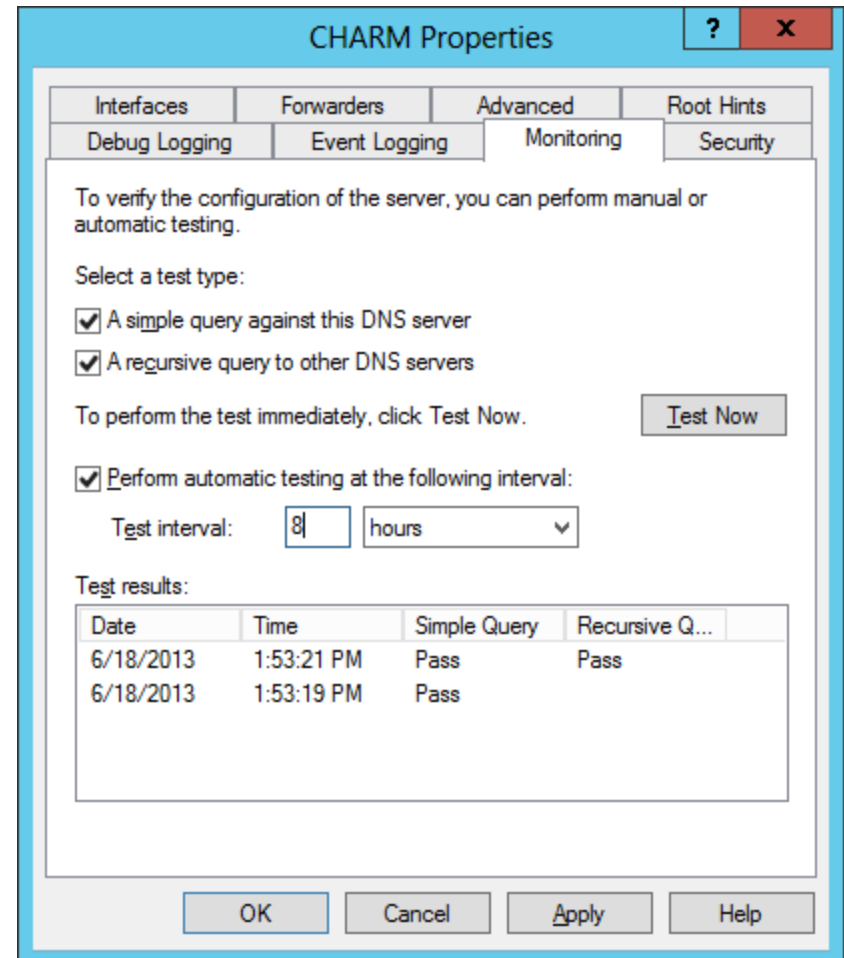
# Event Logging Tab

The Event Logging Tab is presently set for recording all events. However, we can select no events, errors only and errors and warnings.

We choose to log all events.

# The Debug Logging Tab

The Debug Logging tab can record packets sent and received to the log file.

We will keep this setting off by default.