

Hi folks,

I had a few requests from my Channel VARs regarding how to add a dynamic dns client onto my SR520 or UC520.

It took me a while to figure out the syntax, so I thought i would document a method to save you folks a lot of time. The procedure below is only documented for you to try and hopefully it will save you some time. The procedure below is not by any means a definitive example. If you run into any trouble, refer to the Cisco URL mentioned below.

Obviously this procedure should be used when the WAN interfaces, FastEthernet 0/0 on the UC520 or FastEthernet 4 on the SR520, are setup to accept an IP address via a DHCP server.

For the sake of brevity I will put an example down for the SR520, but you can replace FastEthernet4 with FastEthernet 0/0 for the UC520. You may also have to add an extended access-list entry onto your unit to allow for http responses from dyndns.

DYNDNS graciously allow you to have up to five free domain names. I think it's worth the effort to get dynamic dns working, if you only have a dynamic WAN IP address, makes it easier to get to the UC520 or SR520 for remote management or VPN purposes.

My reference for this document is the following Cisco URL;

[http://www.cisco.com/en/US/docs/ios/ipaddr/configuration/guide/iad\\_ddns\\_ps6441\\_TSD\\_Products\\_Configuration\\_Guide\\_Chapter.html#wp1222201](http://www.cisco.com/en/US/docs/ios/ipaddr/configuration/guide/iad_ddns_ps6441_TSD_Products_Configuration_Guide_Chapter.html#wp1222201)

The commands below must entered via Command line interface (CLI). It's better to manually type in the following commands. Please modify the user options in **red** to suit your needs. If you want to cut and paste commands, then grab the referenced Cisco URL mentioned previously and cut and paste commands from that document.

*Note: To successfully do this procedure you must already have a free or paid account with dynamic dns (<http://www.dyndns.com/>) and have setup a domain name.*

**configure terminal**

**ip dhcp update dns both**

**ip dhcp-client update dns server both**

**ip ddns update method DynDNS**

**HTTP**

**http://**user:password**@members.dyndns.org/nic/update?system=dyndns&hostname=<h>&myip=<a>**

Before entering the question mark (?) character, press the control (Ctrl) key and the v key together on your keyboard. This will allow you to enter the ? without the software interpreting the ? as a help query.

**interval maximum 27 0 0 0**

**interval minimum 25 0 0 0**

```
interface fastethernet4
ip dhcp client update dns
ip ddns update hostname myhost.homeip.net
ip ddns update DynDNS host members.dyndns.org
ip ddns update myhost.homeip.net
exit
```

Please note, my UC520, which was configured via CCA version 2.0. CCA automatically set up quite a large access-list that filtered incoming traffic on the FastEthernet 0/0 interface. I had to manually add a extended access list entry to allow for responses from dyndns. My access list entry is shown below

```
.
access-list 106 permit tcp host 204.13.248.112 eq www any log
```

### Testing

You can try the following debug commands to see if dynamic dns is configured correctly and working. Also check on your dyndns account to see if the IP address assigned to your domain name has altered.

To verify that the router is going to Dyndns for a domain name update, unplug the ethernet cable going to your UC520 or SR520 WAN interface

```
terminal monitor
debug ip ddns update
```

plug back in the WAN Ethernet cable and observe the terminal output.

### Conclusion

For a better understanding of the options show, refer to the Cisco URL shown above. If you find all is working well, remember to write the running configuration to flash.

```
write mem
```

Good luck and have fun

Dave Hornstein  
Small Business Channel, Systems Engineer