

How to enable IPv6 on a Cisco Router

Now in order for you to allow (enable) a Cisco router to begin routing IPv6 packets, you'll need to perform the following two tasks.

Step1 - Enable IPv6 routing globally on the router Step2 - **enable IPv6 processing on a particular interface(s)**. To begin completing task number one (enabling IPv6 routing globally on a router) you'll need to enter Global Configuration mode and type `ipv6 unicast-routing` on the router like you see here: Router>enable Router#configure terminal Router(config)#**ipv6 unicast-routing** Router(config)#exit Router# Notice, that I typed the word "enable" while the router was in User Exec mode (Router>) which then placed the router into Privileged Exec mode (Router#). Then once the router was in Privileged Exec mode (Router#) I typed the words "configure terminal" which then placed the router into Global Configuration mode (Router(config)#) so I could begin configuring the router to globally route IPv6 packets; and as you can see, I typed the Global Configuration command "ipv6 unicast-routing" to complete task number one. So, to make a long story short, the command that you need to type on a Cisco router to enable it globally for IPv6 packet routing is "**ipv6 unicast-routing**". Now, that I've successfully completed task number one, I typed the word "exit" to leave Global Configuration mode (Router(config)#) and re-entered into Privileged Exec mode (Router#). Router>enable Router#configure terminal Router(config)#**ipv6 unicast-routing** Router(config)#**exit** Router#configure terminal Router(config)#interface fastethernet 0/0 Router(config-if)#**ipv6 enable**

Router(config-if)# Now, since the router is back into Privileged Exec mode (Router#), I continued on to completing task number two (enabling IPv6 processing on a particular interface(s)). By re-typing the command "configure terminal" which placed the router back into Global Configuration mode (Router(config)#), so I could use the "interface" command to specify the interface type (fastethernet) and its slot and port information (0/0). Notice, that the router has entered into Interface Configuration mode (Router(config-if)#) by hitting the enter key, and once the router was in Interface Configuration mode (Router(config-if)#); I used the interface command "**ipv6 enable**" to enable the fastethernet 0/0 interface for IPv6 processing to complete task number 2. Here's another way the previous commands could have been typed: Router>enable Router#configure terminal Router(config)#`ipv6 unicast-routing` Router(config)#`interface fastethernet 0/0` Router(config-if)#`ipv6 enable` Router(config-if)#`exit` Router# Notice, that it wasn't really necessary to leave Global Configuration mode (Router(config)#) to complete both tasks; I just did it, to show you each task individually. I invite you to visit my website were you'll find the latest information regarding Cisco IPv6 Design and Implementation Techniques. To your success.