The sample configuration below shows most of the commands needed for configuring IPv6 on specified interfaces. There are alternatives to the IPv6 unicast-routing command, such as

```text
ipv6 enable
```

Or
```text
mls cef maximum-routes ipv6 64
```
If you decide to use these, please consult more detailed Cisco documentation. There are consequences and you should be aware of those consequences beforehand.

```text
! version 12.4
!
hostname ENT
!
boot-start-marker
boot system flash:c2600-ik9o3s3-mz.123-3.bin
boot-end-marker
!
ipv6 unicast-routing
ipv6 cef
!
interface FastEthernet0/0
ip address 129.0.2.3 255.255.255.0
ipv6 address 3FFE:C15:C002:46::2/64
ipv6 traffic-filter inbound in
ipv6 rip v6 enable
ipv6 cef
!
interface FastEthernet0/1
ip address 192.0.2.3 255.255.255.0
ipv6 address 3FFE:C15:C002:47::1/64
ipv6 traffic-filter outbound in
ipv6 rip v6 enable
ipv6 cef
!
ipv6 router rip v6
!
!
ipv6 access-list inbound
! deny all traffic with a routing header or undetermined transport
! deny ipv6 any any routing
! deny ipv6 any any undetermined-transport
! permit link local traffic between routers
permit ipv6 FE80::/10 FE80::/10
! permit rip traffic
permit ipv6 FE80::/10 host FF02::9
! permit assigned TLAs to talk to our subnets, note that this is a significant departure from v4 bogon filtering in that since only 3 TLAs have actually been assigned, it is easier to expressly permit these TLAs then deny all other traffic than it is to block any of the special use, multicast, or other traffic normally associated with bogon filtering
permit ipv6 2001::/16 host 3FFE:C15:C002:46::2
permit ipv6 2001::/16 3FFE:C15:C002:47::/64
permit ipv6 2001::/16 3FFE:C15:C002:48::/64
permit ipv6 2001::/16 3FFE:C15:C002:49::/64
permit ipv6 2002::/16 host 3FFE:C15:C002:46::2
permit ipv6 2002::/16 3FFE:C15:C002:47::/64
permit ipv6 3FFE::/16 host 3FFE:C15:C002:46::2
```
permit ipv6 3FFE::/16 3FFE:C15:C002:47::/64
permit ipv6 3FFE::/16 3FFE:C15:C002:48::/64
permit ipv6 3FFE::/16 3FFE:C15:C002:49::/64
! permit ND messages
permit icmp any any nd-na
permit icmp any any nd-ns
! deny all other traffic
sequence 210 deny ipv6 any any log
!
ipv6 access-list outbound
! deny all traffic with a routing header or undetermined transport
deny ipv6 any any routing
deny ipv6 any any undetermined-transport
! permit link local traffic between routers
permit ipv6 FE80::/10 FE80::/10
! permit rip traffic
permit ipv6 FE80::/10 host FF02::9
! permit our subnets to talk to the TLAs (and the local router)
permit ipv6 3FFE:C15:C002:47::/64 host 3FFE:C15:C002:47::1
permit ipv6 3FFE:C15:C002:47::/64 2001::/16
permit ipv6 3FFE:C15:C002:47::/64 2002::/16
permit ipv6 3FFE:C15:C002:47::/64 3FFE::/16
permit ipv6 3FFE:C15:C002:48::/64 host 3FFE:C15:C002:47::1
permit ipv6 3FFE:C15:C002:48::/64 2001::/16
permit ipv6 3FFE:C15:C002:48::/64 2002::/16
permit ipv6 3FFE:C15:C002:48::/64 3FFE::/16
permit ipv6 3FFE:C15:C002:49::/64 host 3FFE:C15:C002:47::1
permit ipv6 3FFE:C15:C002:49::/64 2001::/16
permit ipv6 3FFE:C15:C002:49::/64 2002::/16
permit ipv6 3FFE:C15:C002:49::/64 3FFE::/16
! permit ND messages
permit icmp any any nd-na
permit icmp any any nd-ns
! deny all other traffic
deny ipv6 any any log
!
end