#### IPv6 RA Options for Next Hop Routes

Behcet Sarikaya(sarikaya@ieee.org)

IETF 87



draft-sarikaya-6man-rfc4191bis-00

## **RA Route Option Motivation**



- RFC 4191 defines Route Information Option
- There has been a lot of changes since then in the way we use the networks
- Different scenarios exist now that did not exist before:
- Smart phones with multiple interface connectivity
- The node may also be connected to more than one gateway
- realized by means of dedicated physical of logical links such as VPN access

# RA Route Option Motivation - Continued



- RFC 4191 defines Route Information Option
- Prf field is to prefer the router associated with this IPv6 destination prefix
- Next hop address is missing
- Next hop address metric is missing
- So we need 4191bis

### **RA Route Option Motivation - Continued**

- Source Address Based Routing Considerations
- This problem happens when ingress filtering is used
- Router may indicate source addresses/ source prefixes subject to ingress filtering
- So the host can avoid these addresses with this router
- We present RA based solution
- So we need 4191bis

#### **Proposed RA Options**

Details are in the draft

Sections 7 through 13 define these new RA options

#### **Next Steps**

Please read and comment

