

word-smithing
welcome

Enabling secure network enrollment in RPL networks

draft-ietf-roll-enrollment-priority-03

Michael Richardson

mcr+ietf@sandelman.ca

IETF107, April 2020

Status of Document

- split off from 6tisch-enhanced-beacon in 2016
- was richardson-6tisch-roll-join-priority in Feb 2018, but renamed enrollment-priority to avoid confusion.
- version -02 just posted, edited to remove all references to “join”, but kept “Join Proxy” term to match draft-ietf-6tisch-minimal-security

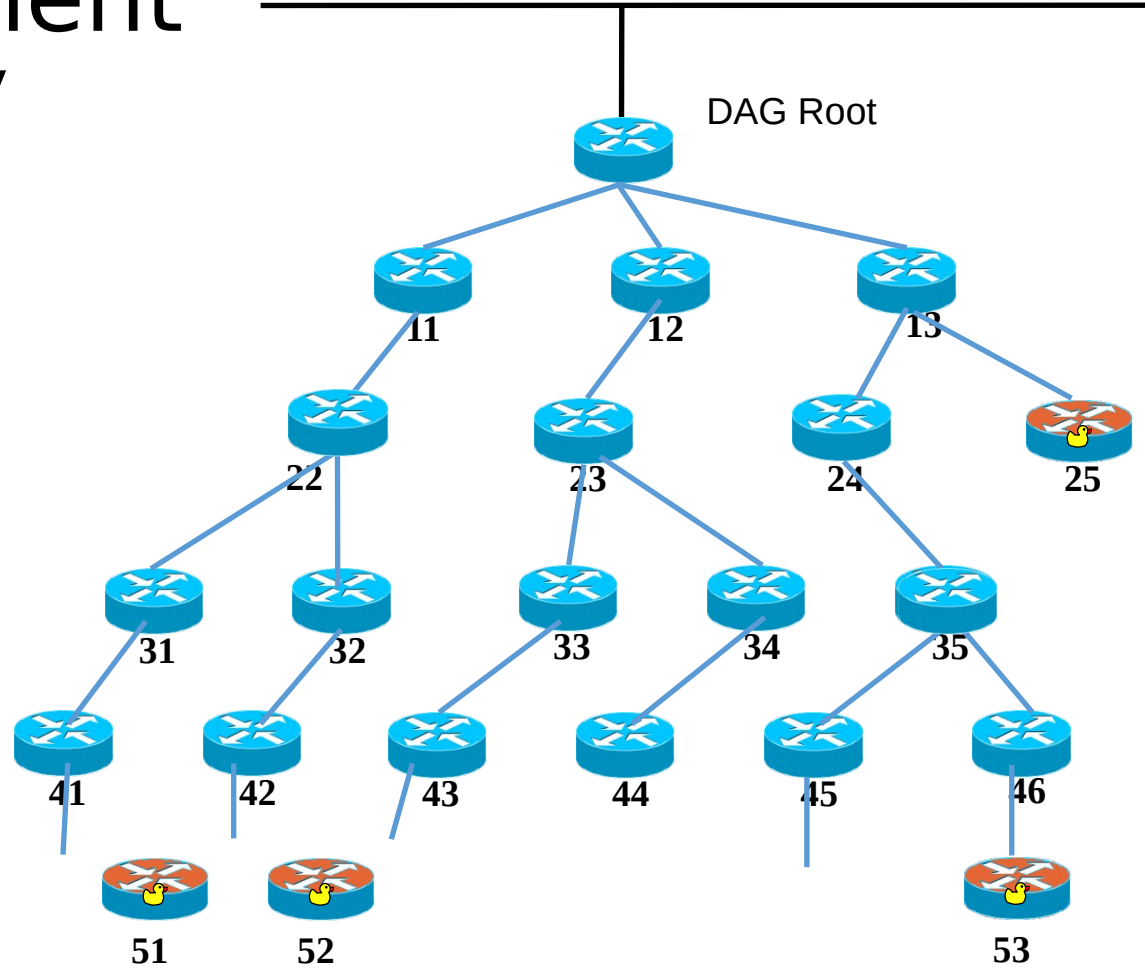
version -02

- all uses of “join” -> enroll or enrollment
- added section on what to do if option is not present

Example enrollment priority

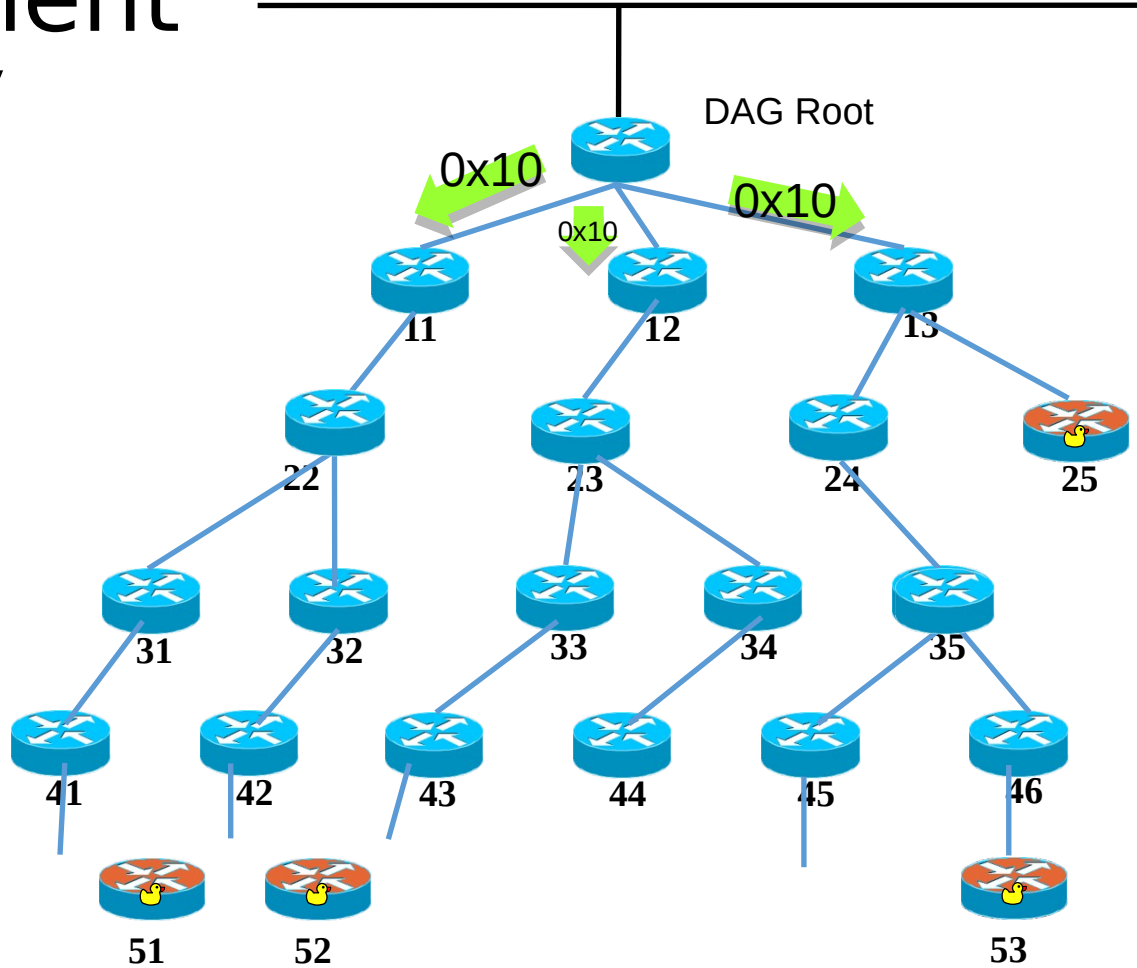


JRC



base diagram from PThubert

Example enrollment priority



Enhanced Beacons

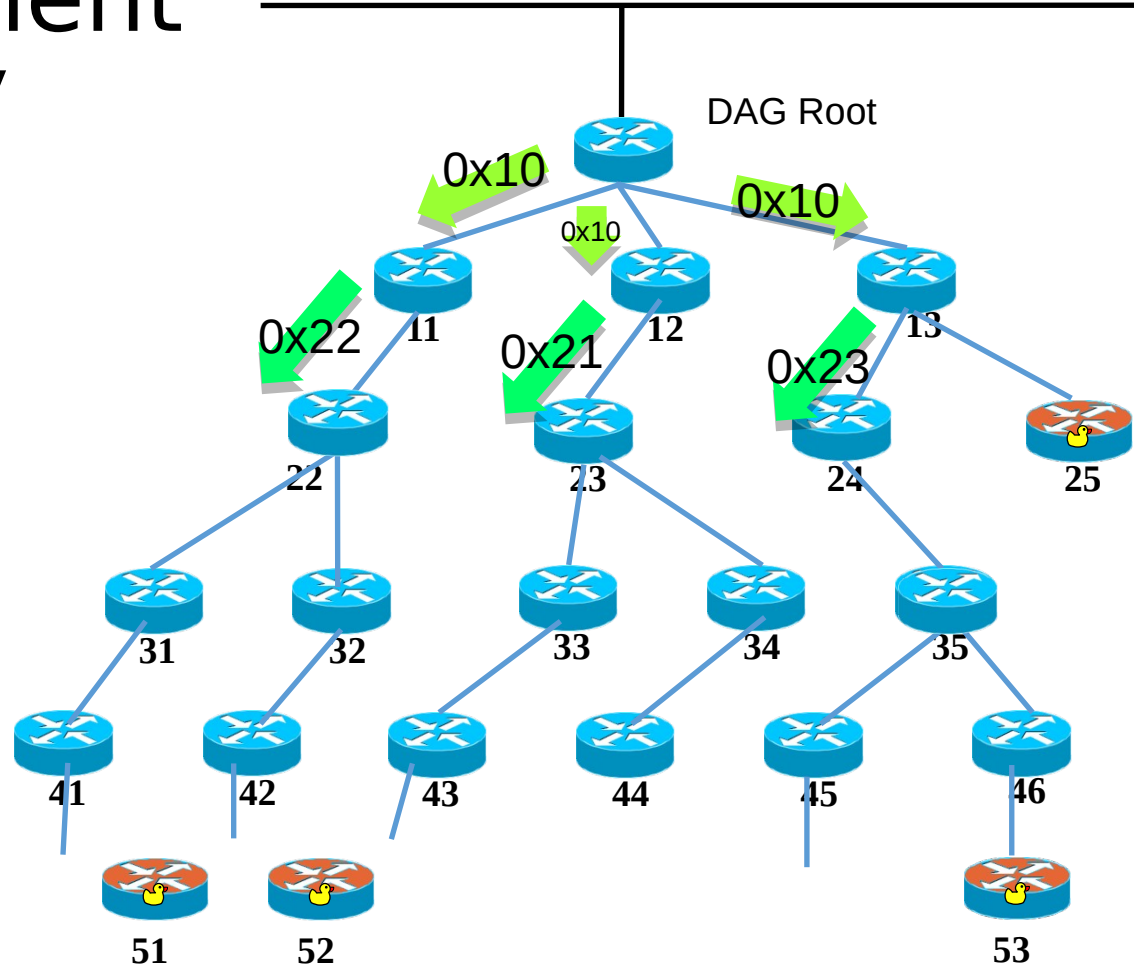
DIOs

base diagram from PThubert

Example enrollment priority

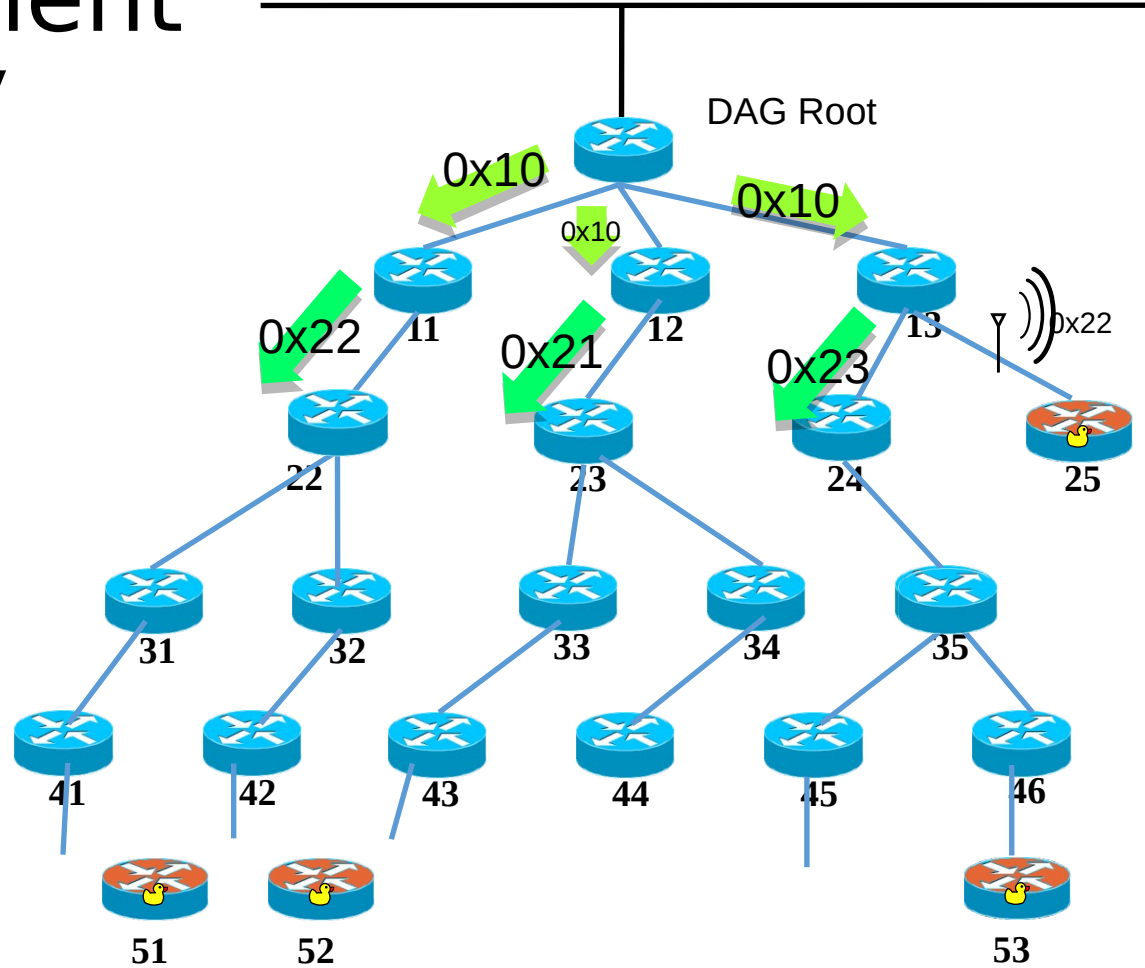


JRC



base diagram
from PThubert

Example enrollment priority

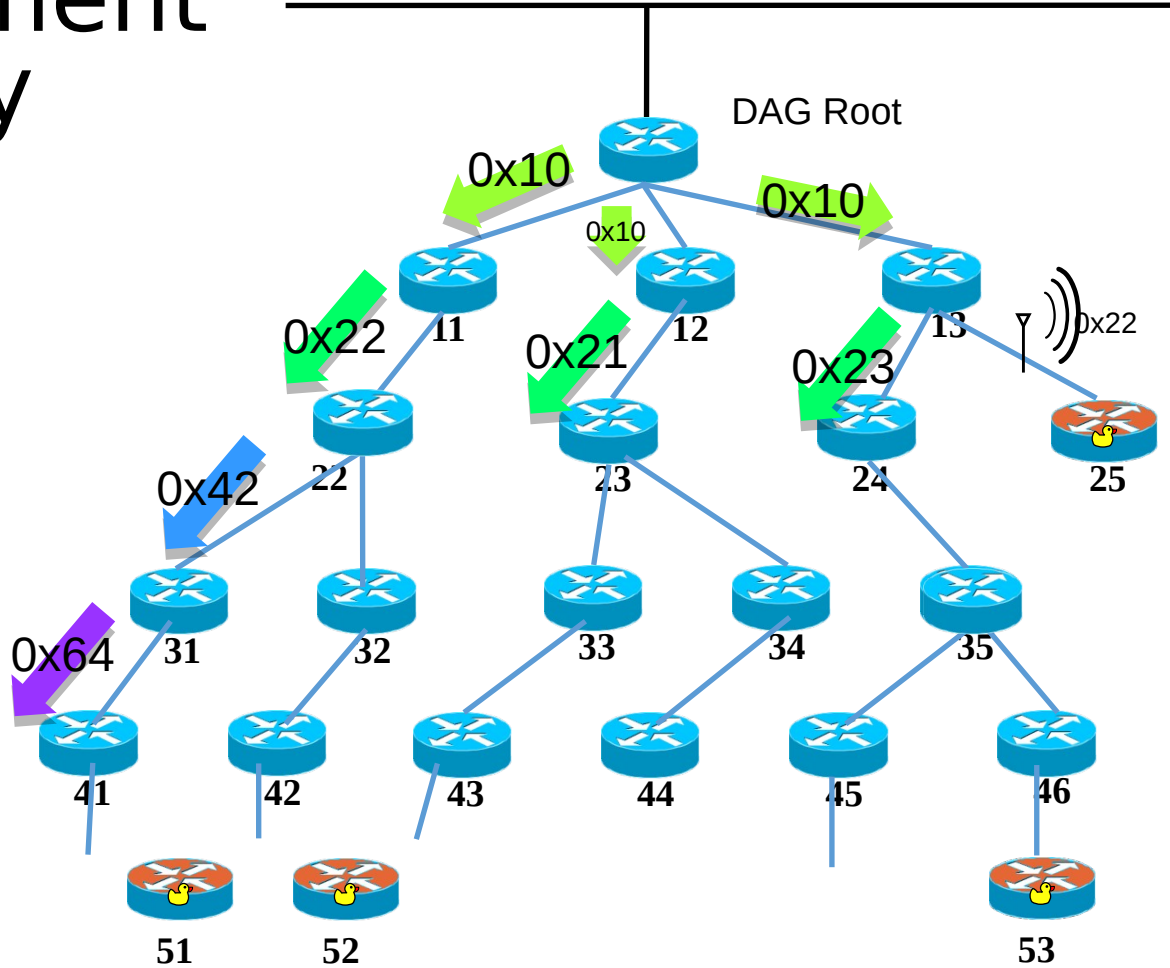


base diagram
from PThubert

Example enrollment priority



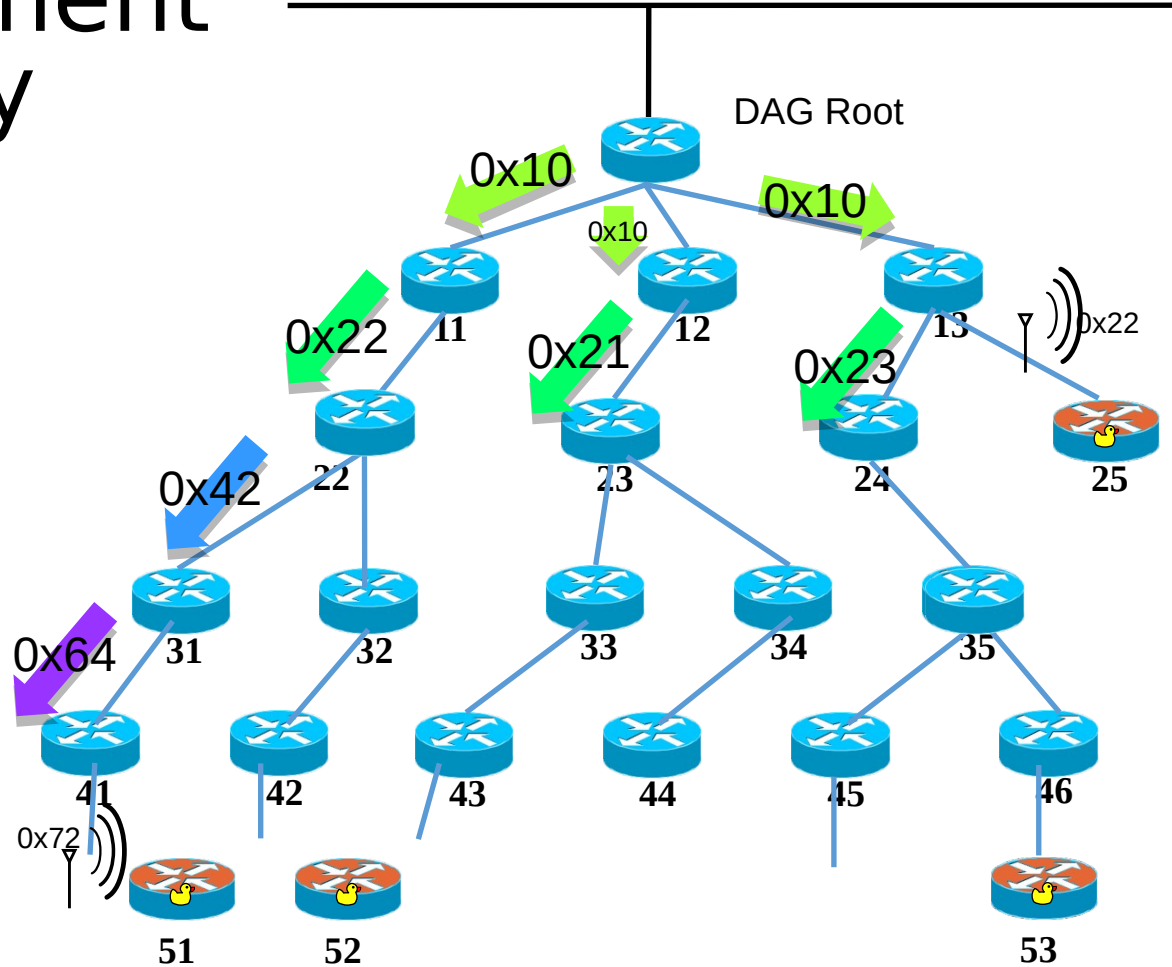
JRC



Enhanced Beacons
DIOs

base diagram from PThubert

Example enrollment priority

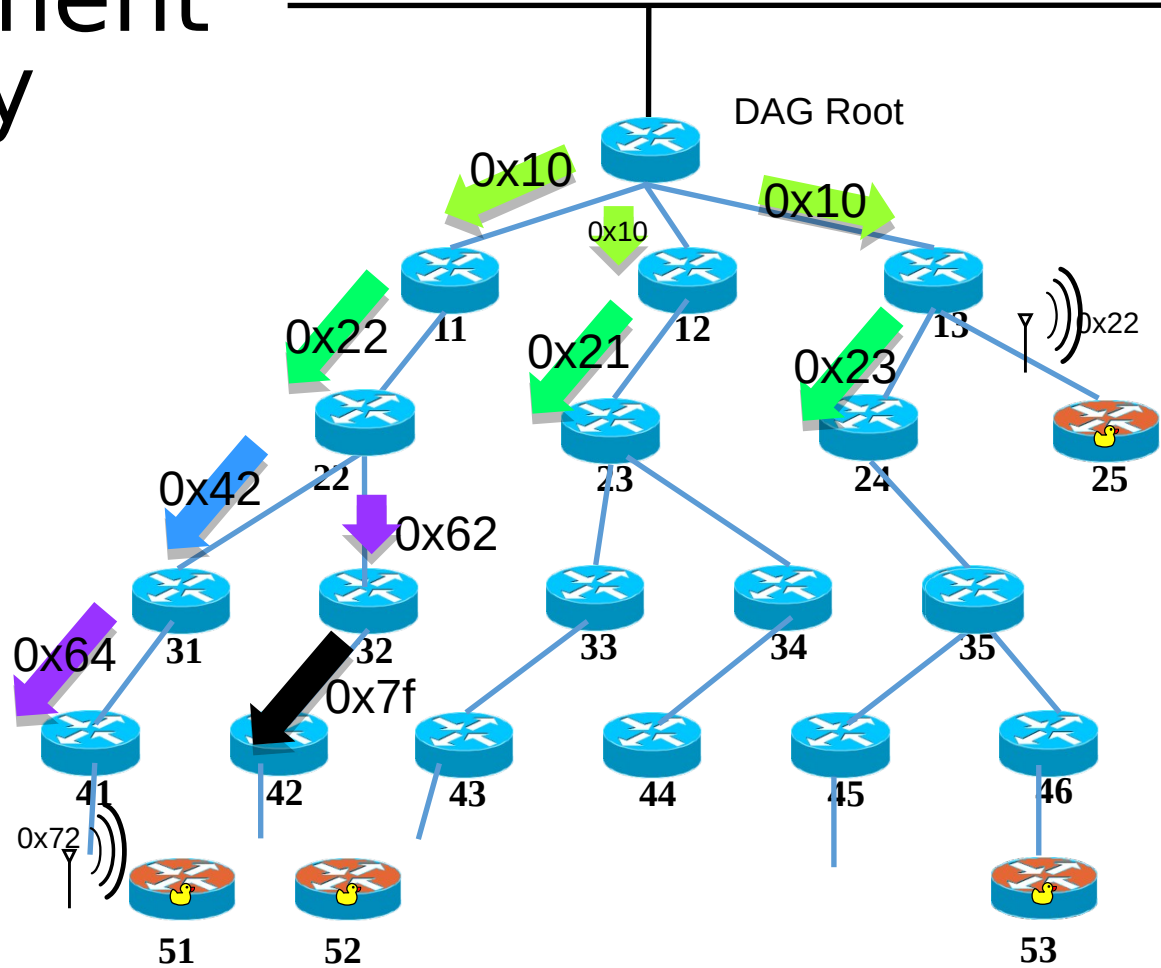


base diagram
from PThubert

Example enrollment priority

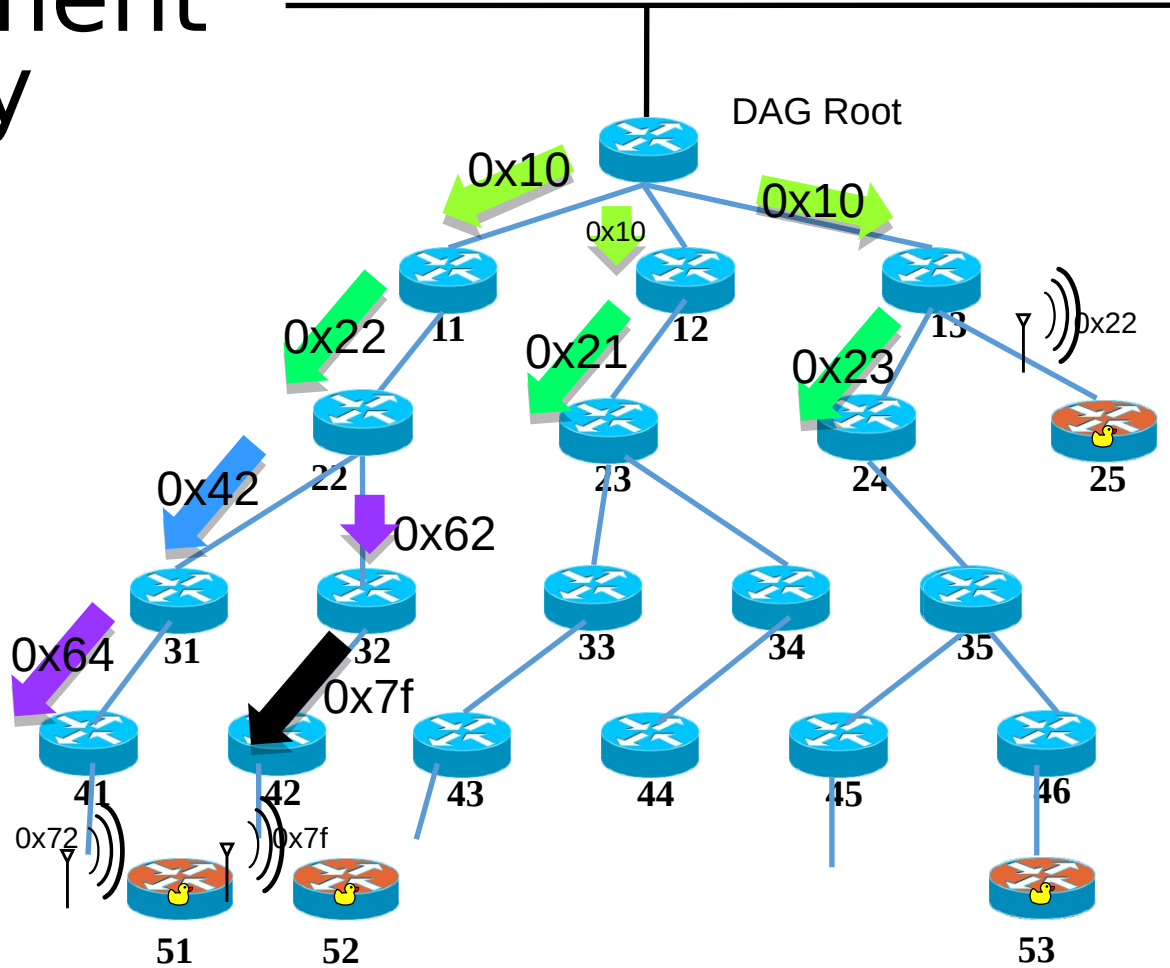


JRC



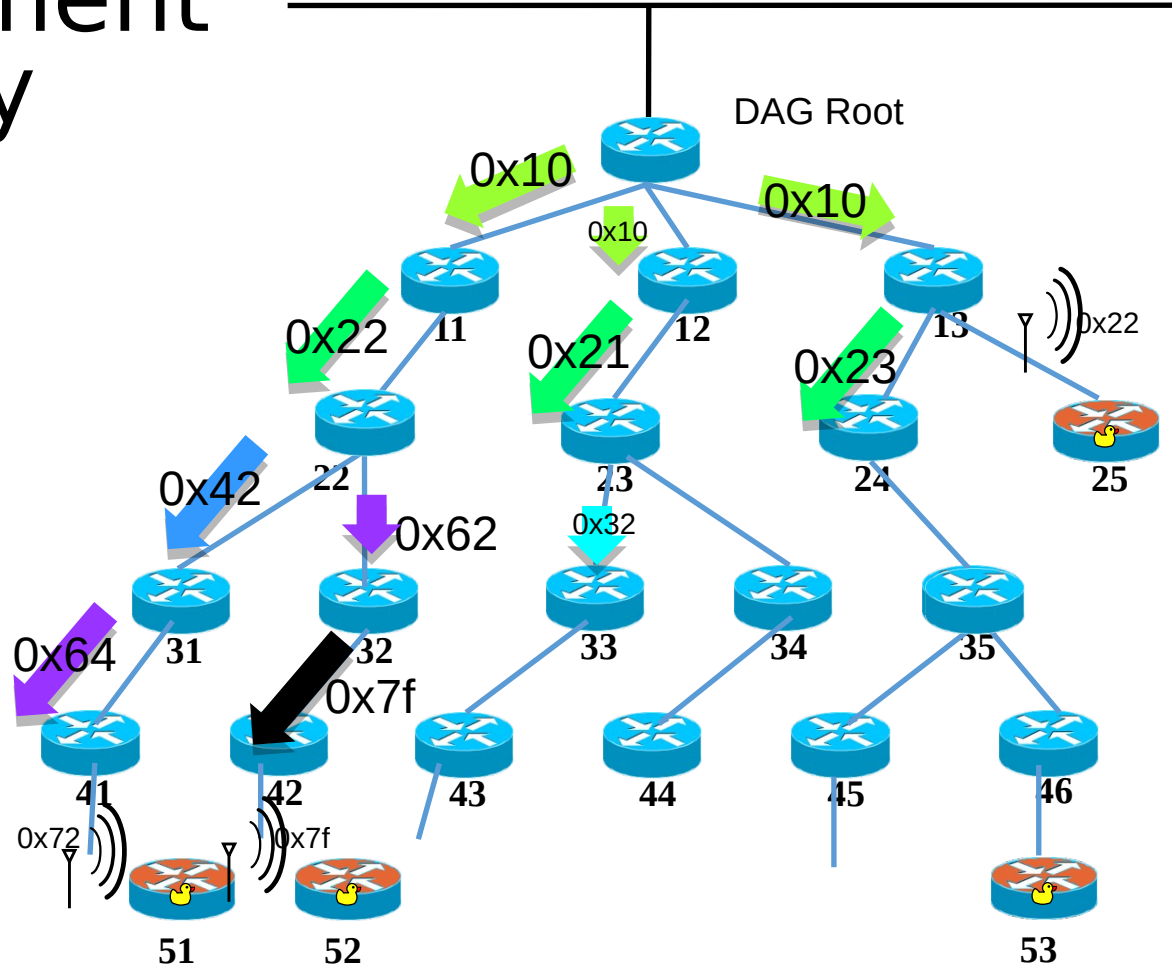
base diagram
from PThubert

Example enrollment priority



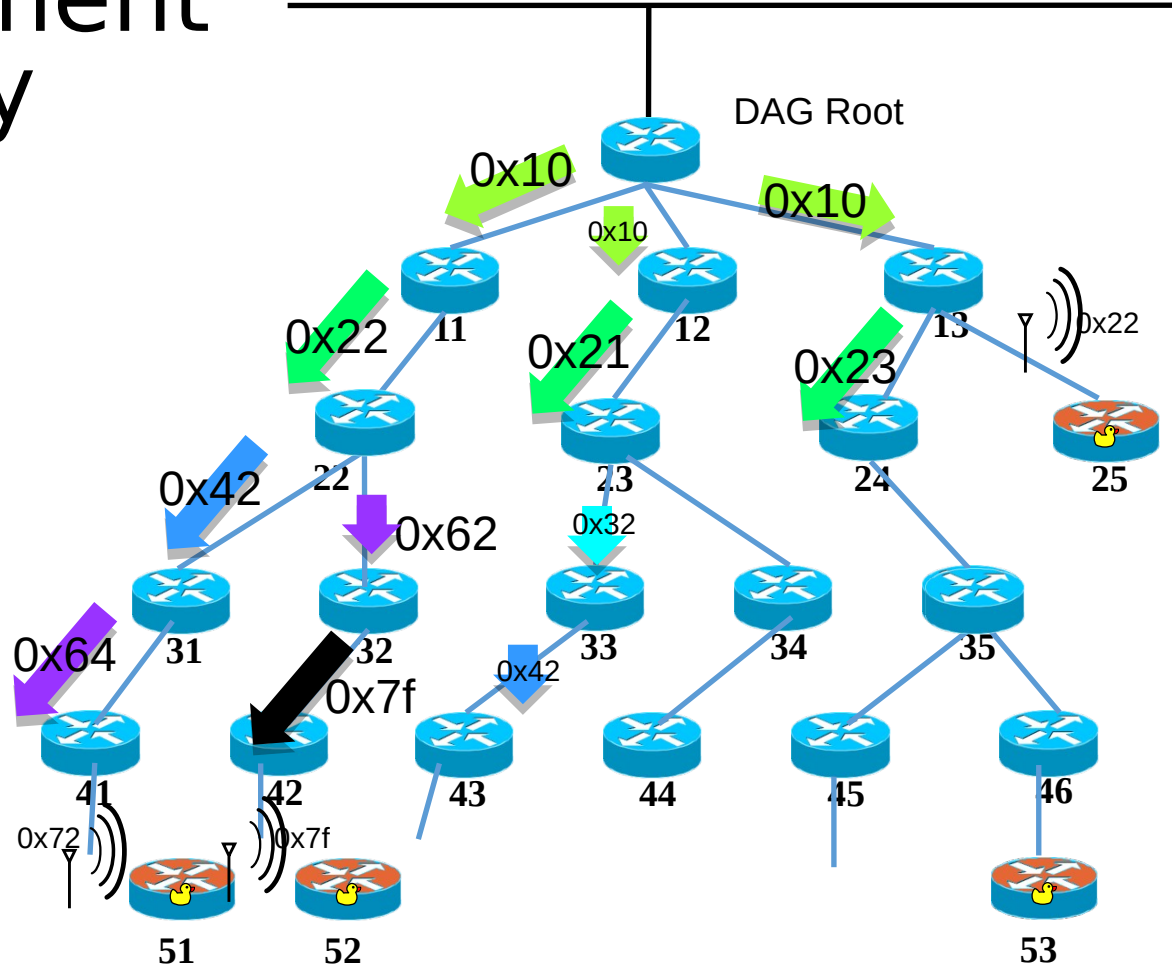
base diagram from PThubert

Example enrollment priority



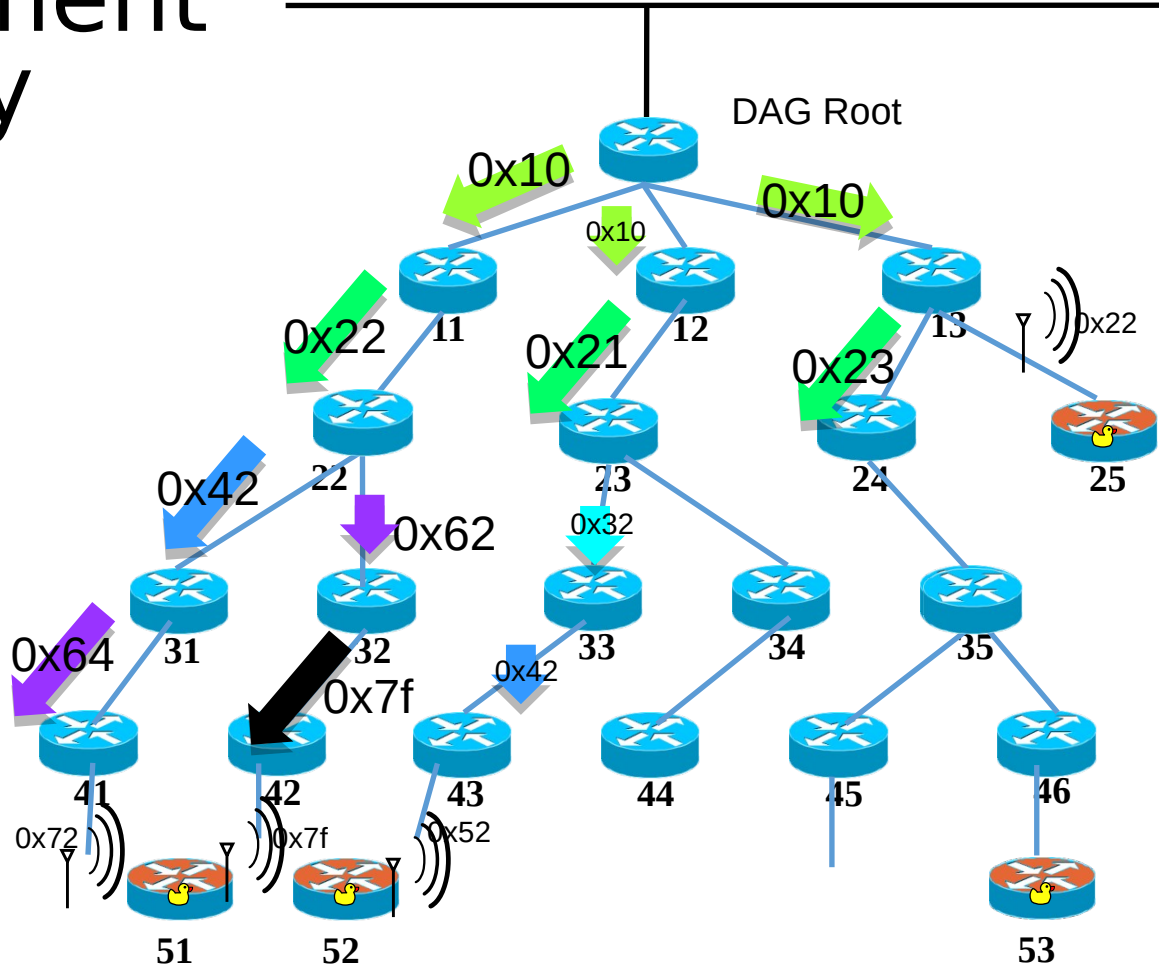
base diagram
from PThubert

Example enrollment priority



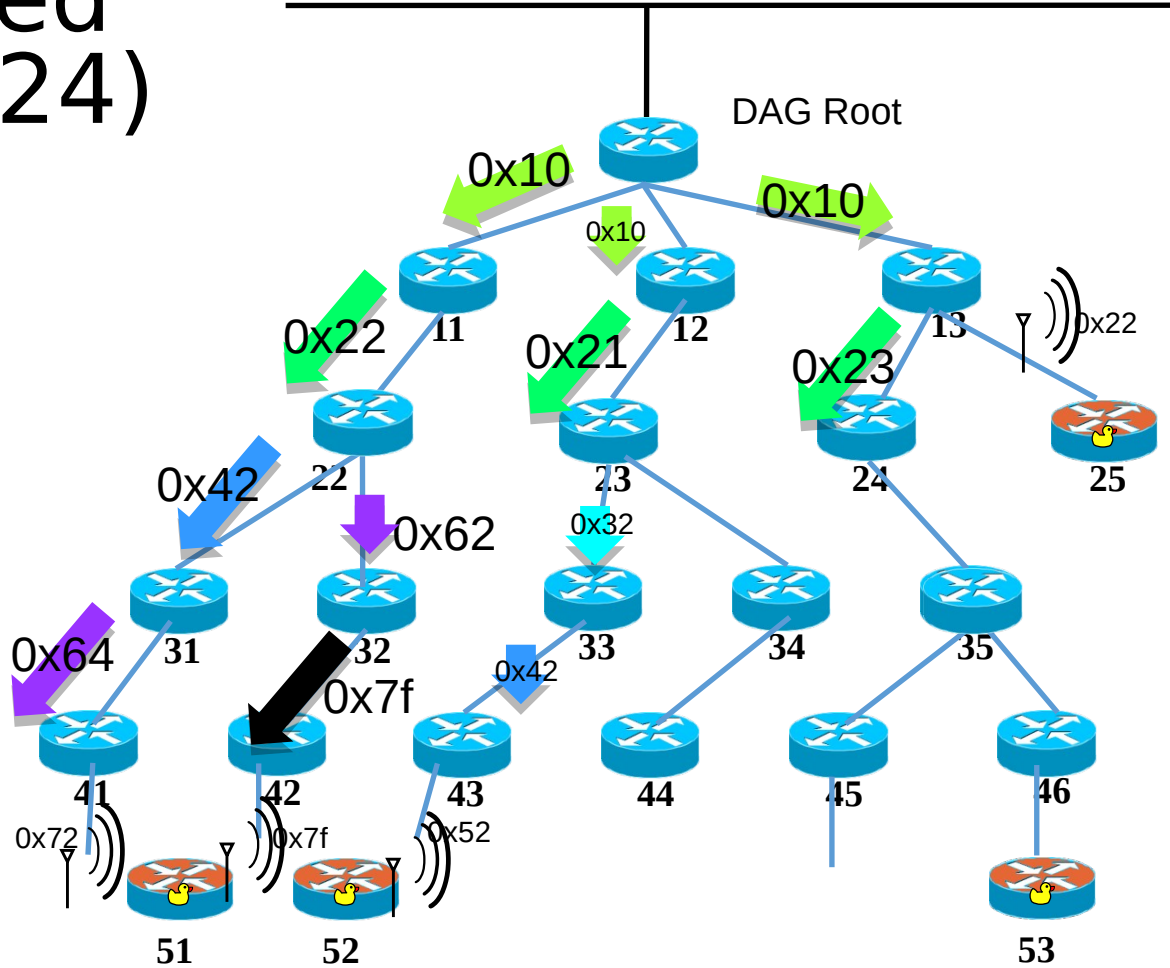
base diagram
from PThubert

Example enrollment priority

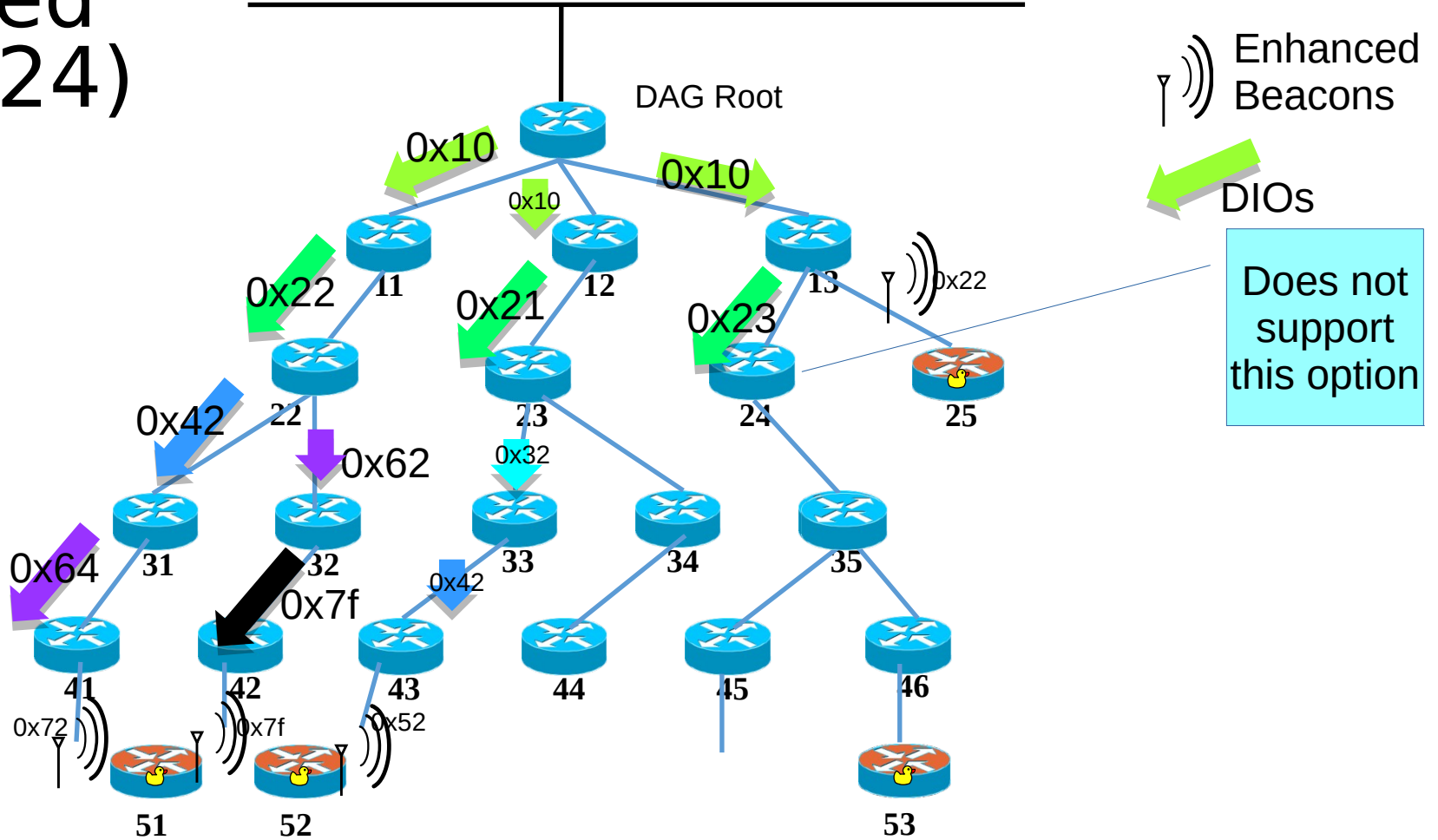


base diagram from PThubert

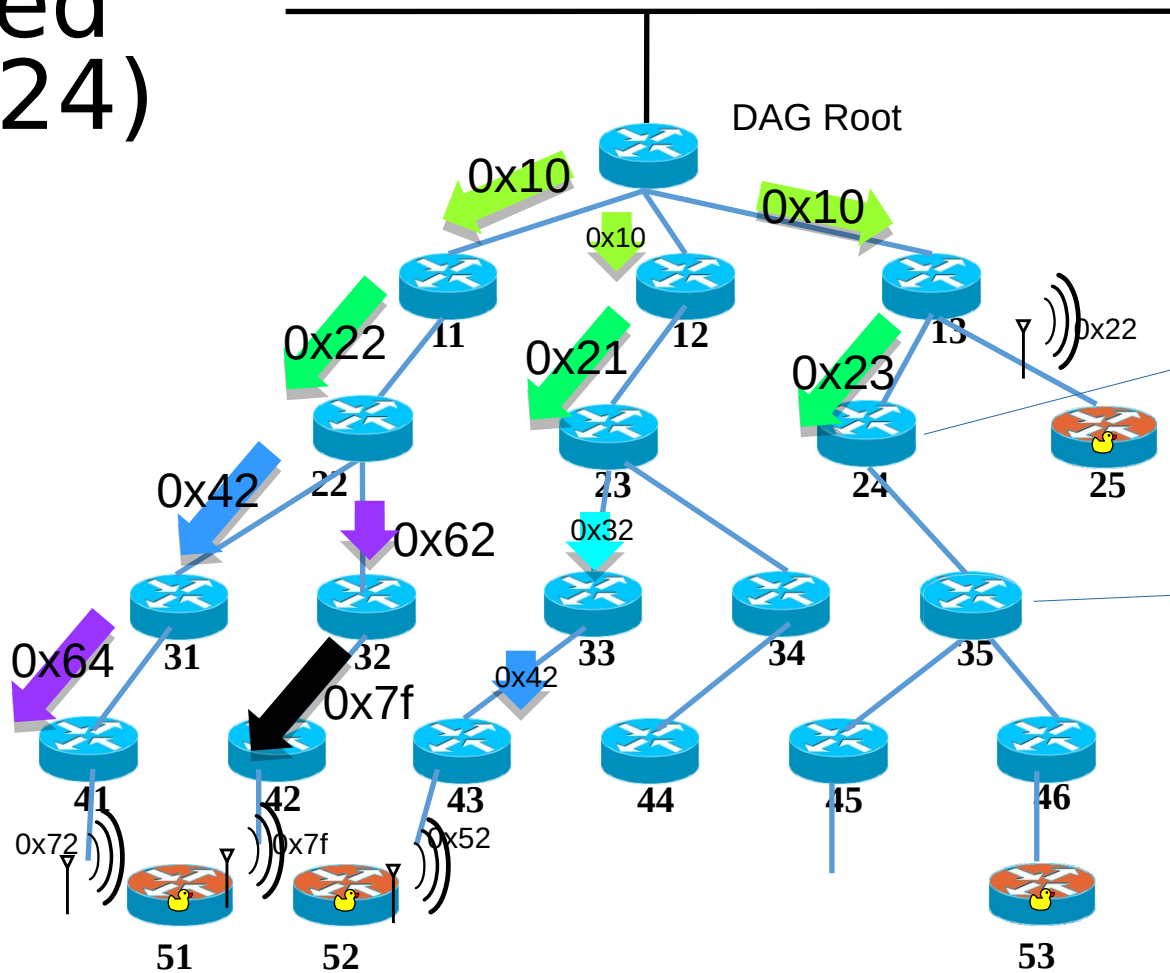
With impaired node (24)



With impaired node (24)



With impaired node (24)



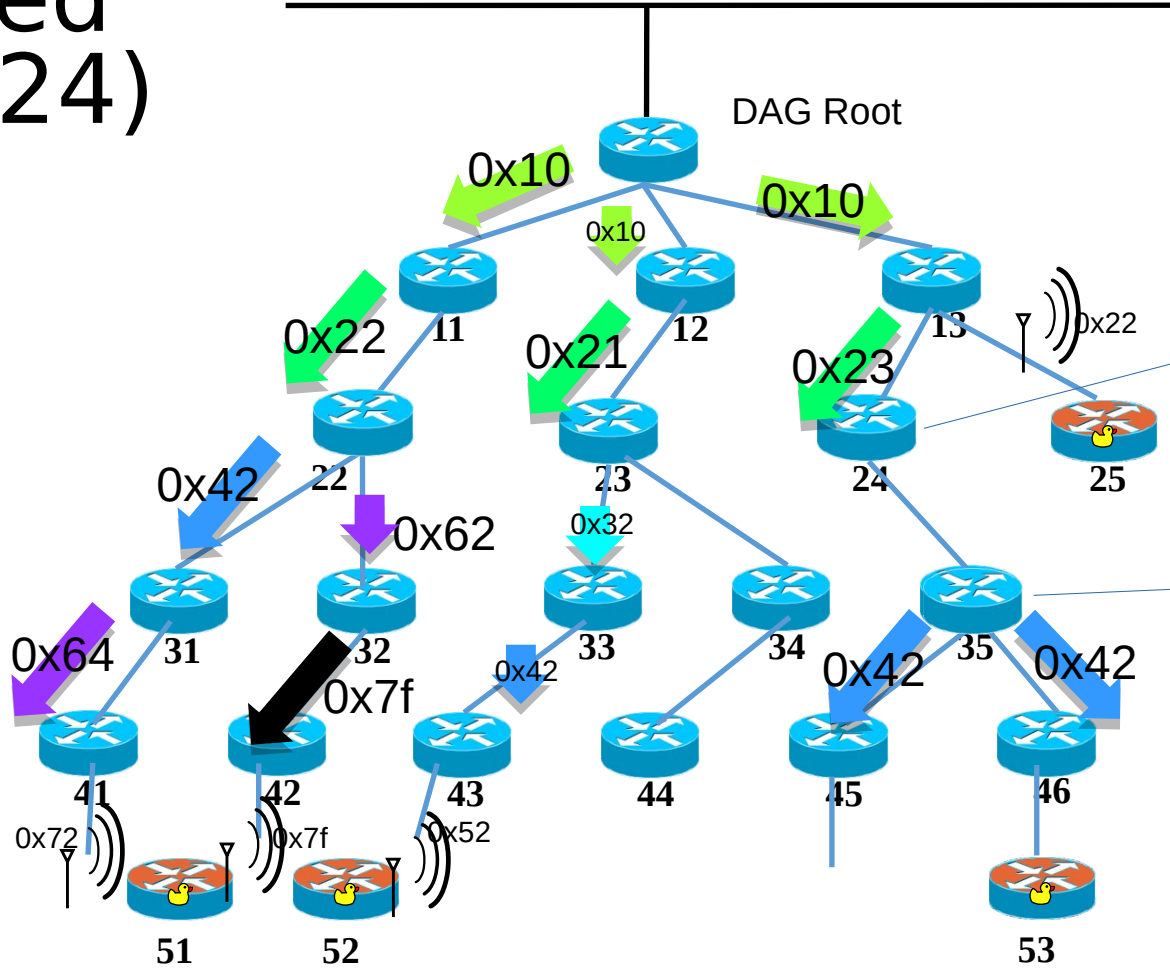
Enhanced Beacons

DIOs

Does not support this option

implied 0x40

With impaired node (24)

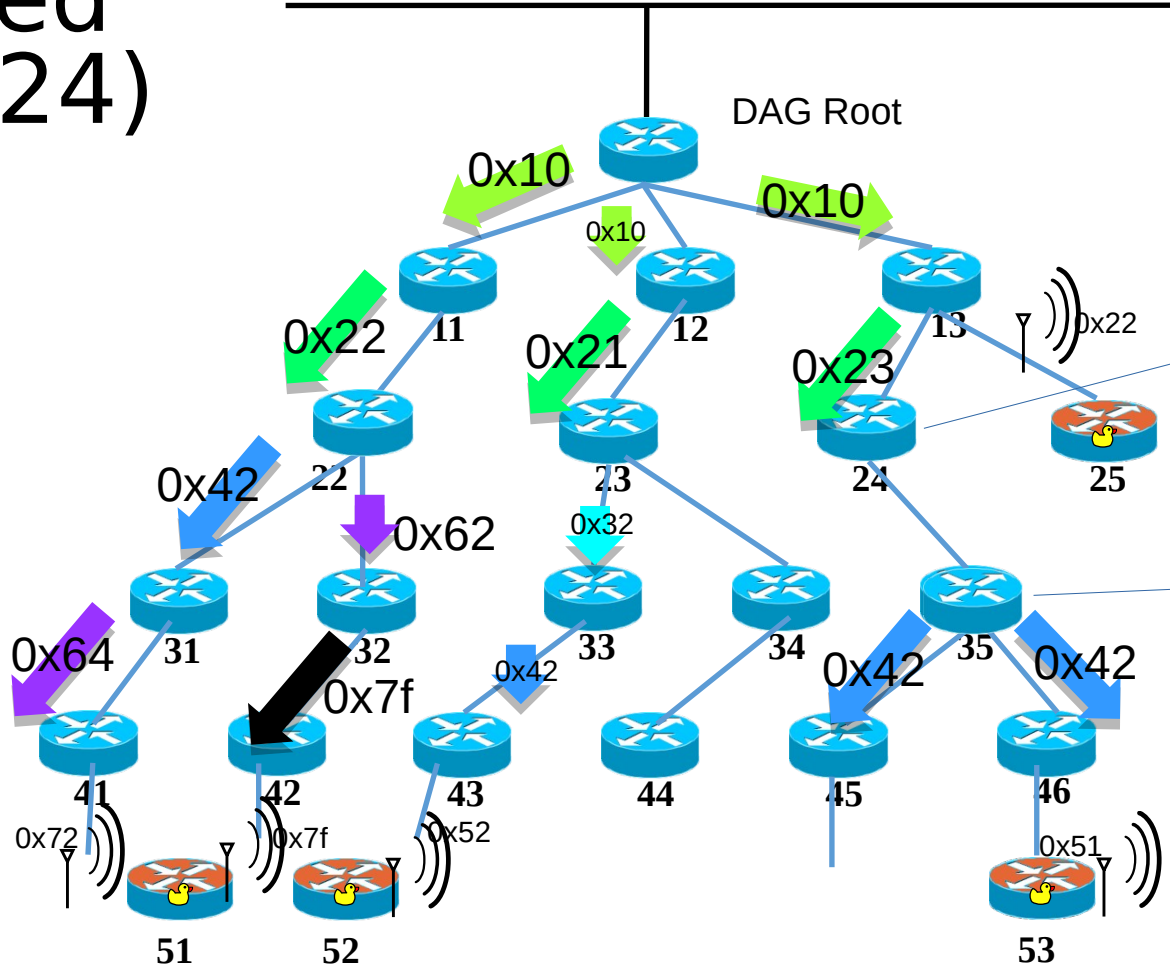


Enhanced Beacons
DIOs

Does not support this option

implied 0x40

With impaired node (24)



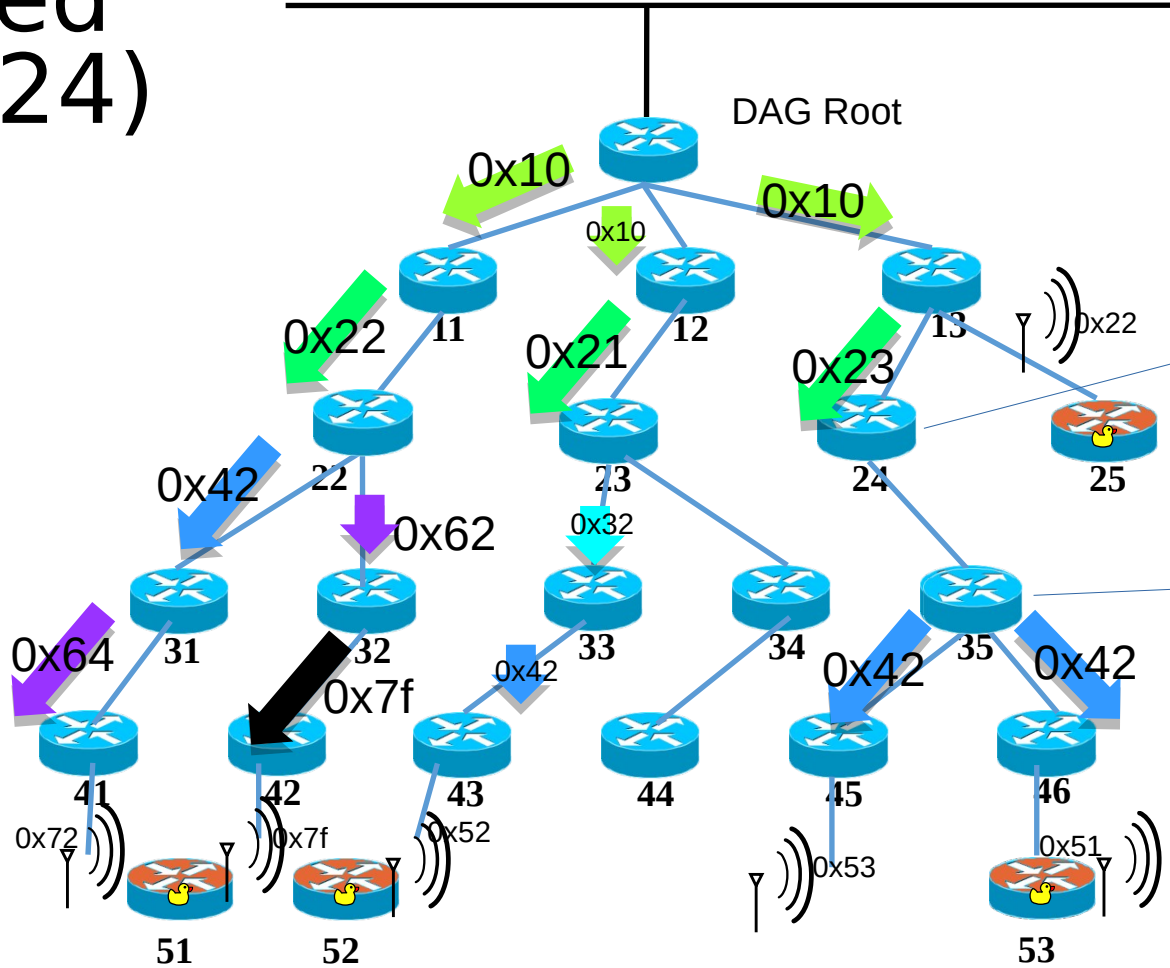
Enhanced Beacons

DIOs

Does not support this option

implied 0x40

With impaired node (24)



Enhanced Beacons

DIOs

Does not support this option

implied 0x40

Questions?

draft-ietf-roll-enrollment-priority-03

Michael Richardson

mcr+ietf@sandelman.ca