RPL Unaware Leaves

draft-ietf-roll-unaware-leaves

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IETF 107

ROLL Virtual Meeting

Status to the draft

- Moved from 06 to 15 since last IETF

- WG progress

- Aligning to use of RPL Info

- WGLC reviews

Major changes

- Improved description of RFC 8505

- Aligned to UseOfRPLInfo (section 6.2)

- Including expected support by RUL (HbH and SRH)

- Added description of 6CIO (RFC 7400)

- New "Root Proxies EDAR/EDAC" (P) Flag in RPL Config

- Added flows for registration termination

- A **lot** of editorial additions and precisions
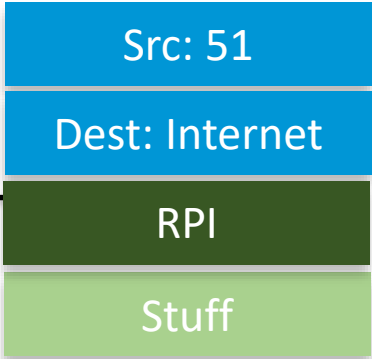
Storing-Mode Overhead (RAN)
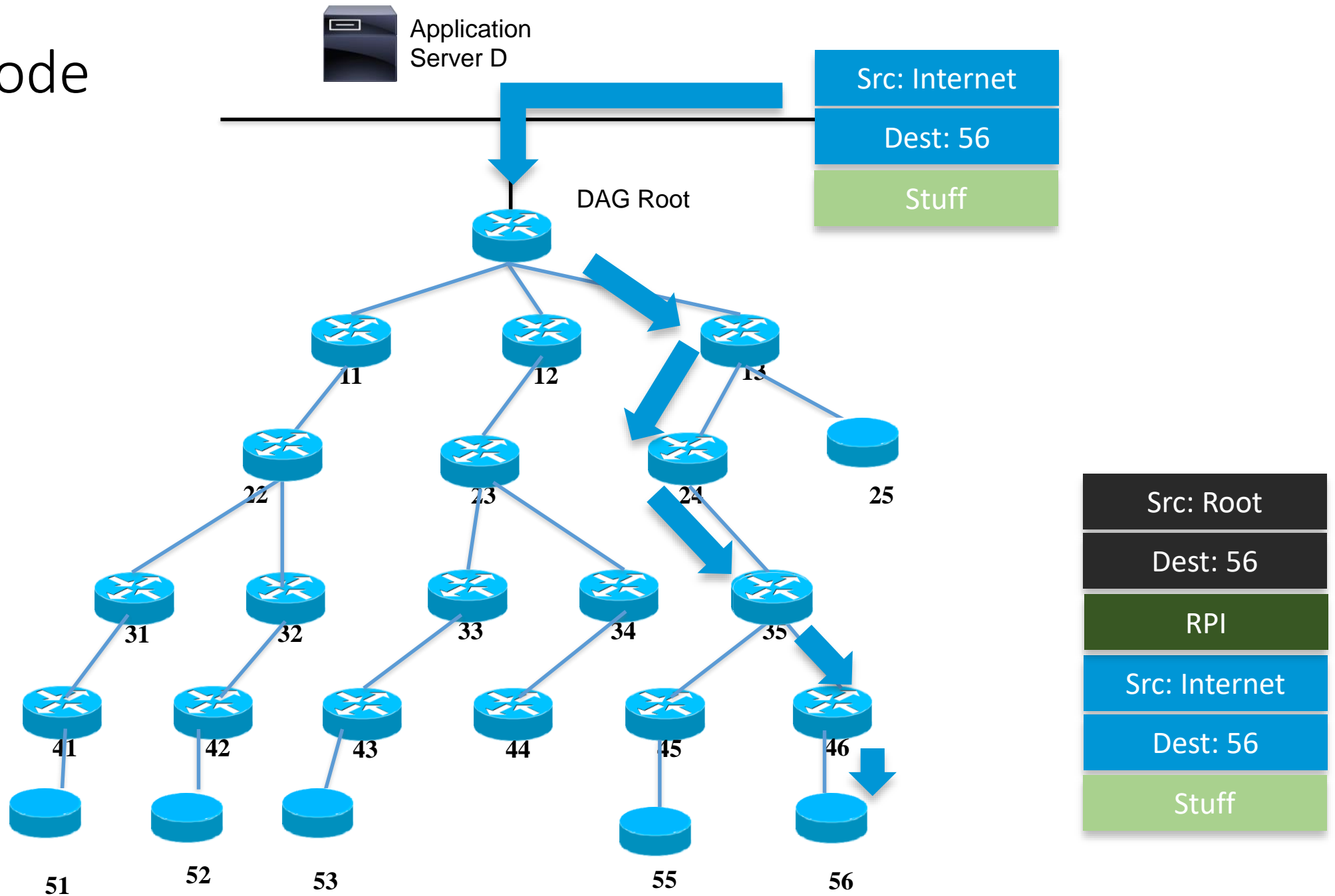
Non-Storing Mode overhead (RAN)
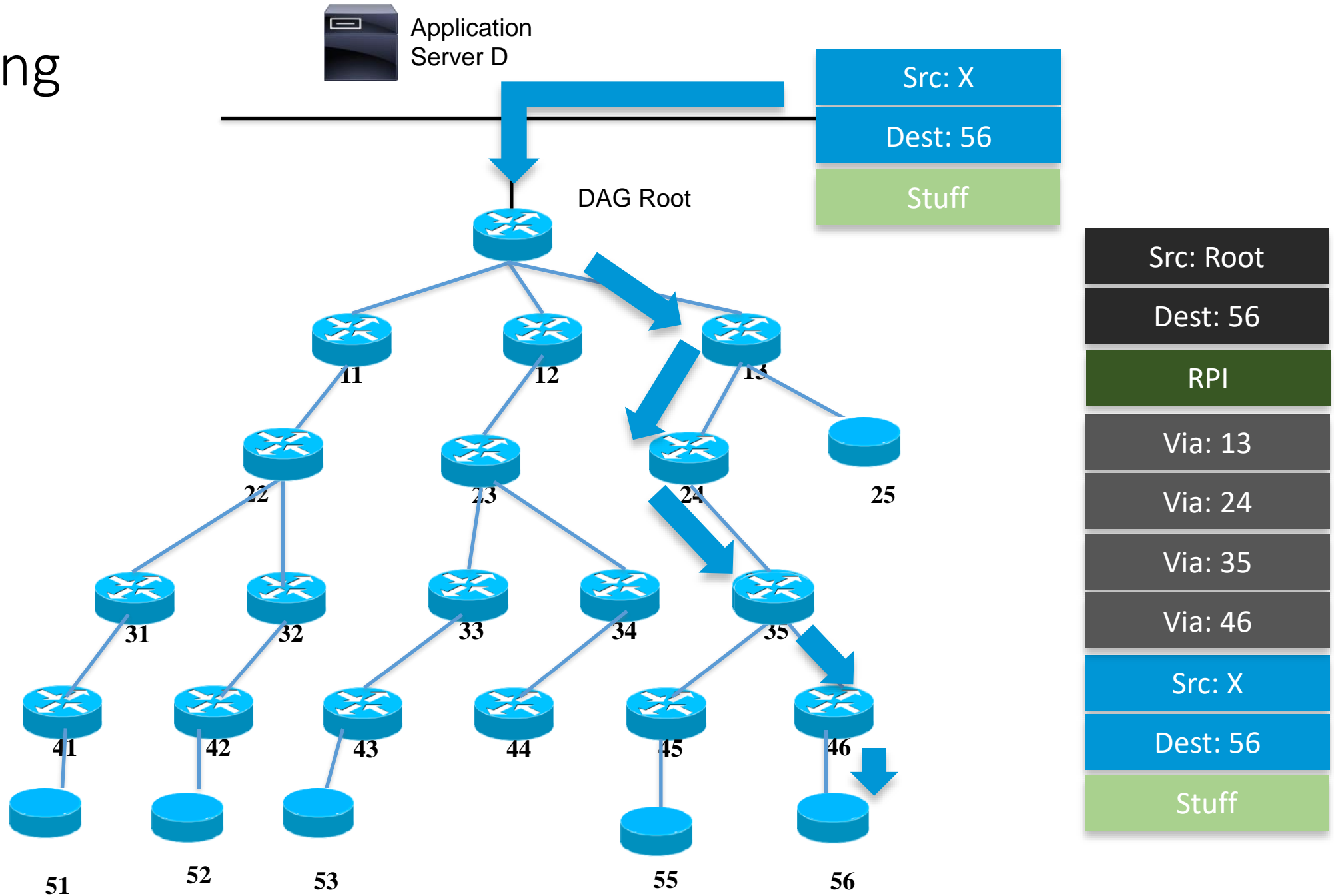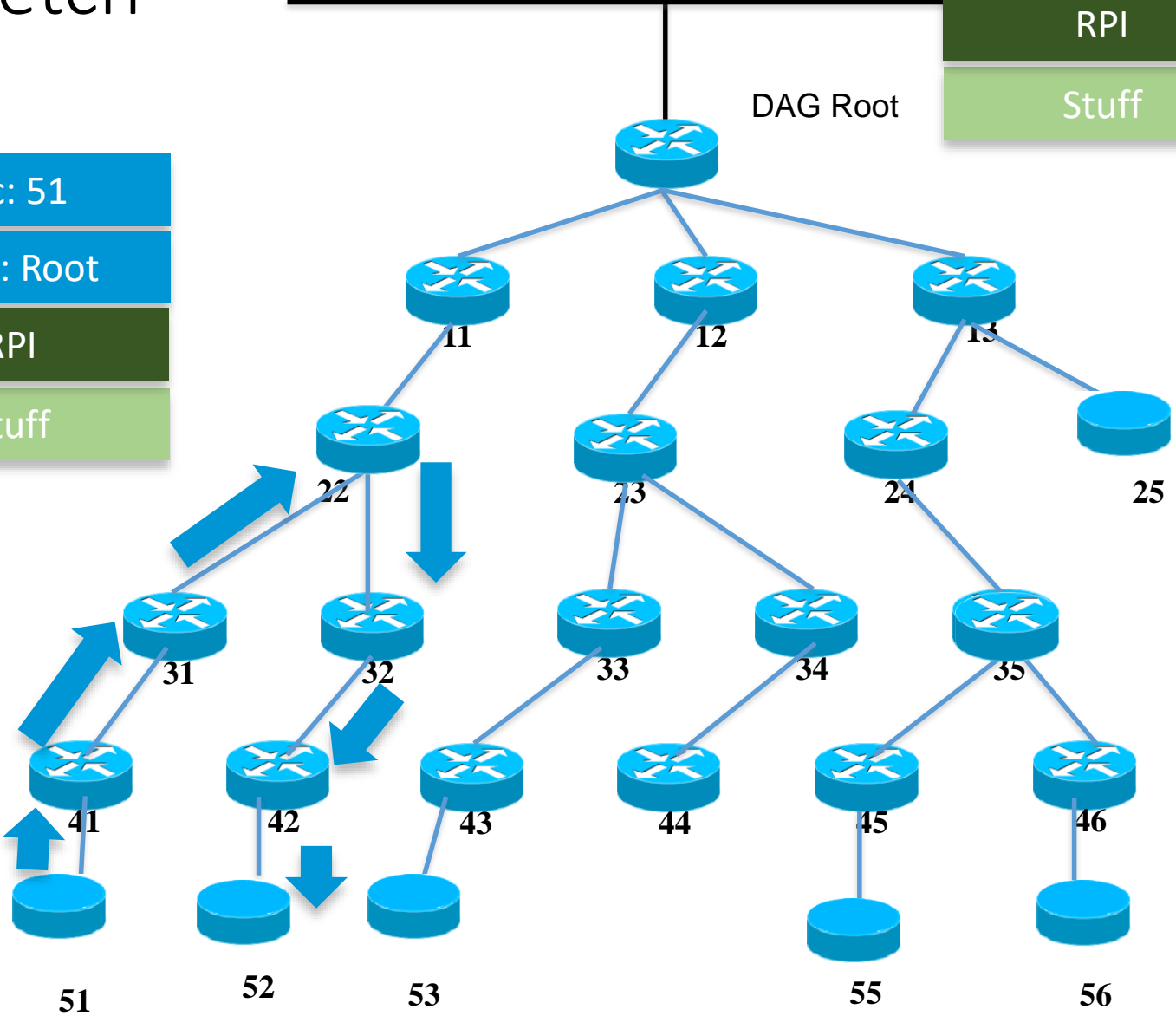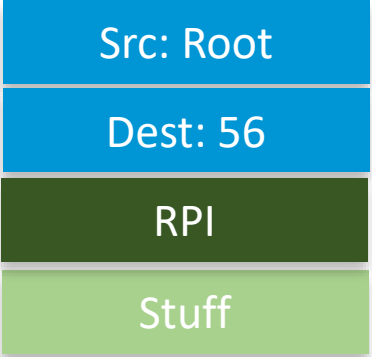
Storing-Mode Routing stretch (RAN)

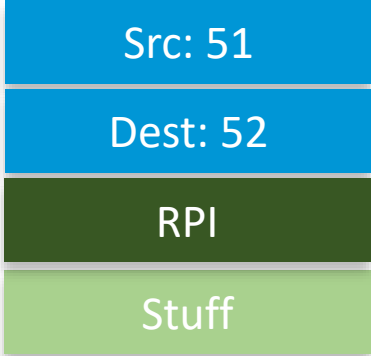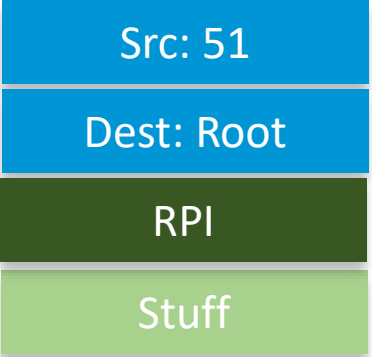Application Server D

DAG Root

| Src: 51 |
| Dest: Internet |
| RPI |
| Stuff |

| Src: 51 |
| Dest: Root |
| RPI |
| Stuff |

Same packet format from RAL to:
- Other RAL
- Root
- The Internet

Due to RPI option type now 0x23

11 12 13

22 23 24 25

31 32 33 34 35

41 42 43 44 45 46

| Src: 51 |
| Dest: 52 |
| RPI |
| Stuff |

| Src: Root |
| Dest: 56 |
| RPI |
| Stuff |

51 52 53 55 56

Non-Storing Routing stretch (RAN)

Application Server D

DAG Root
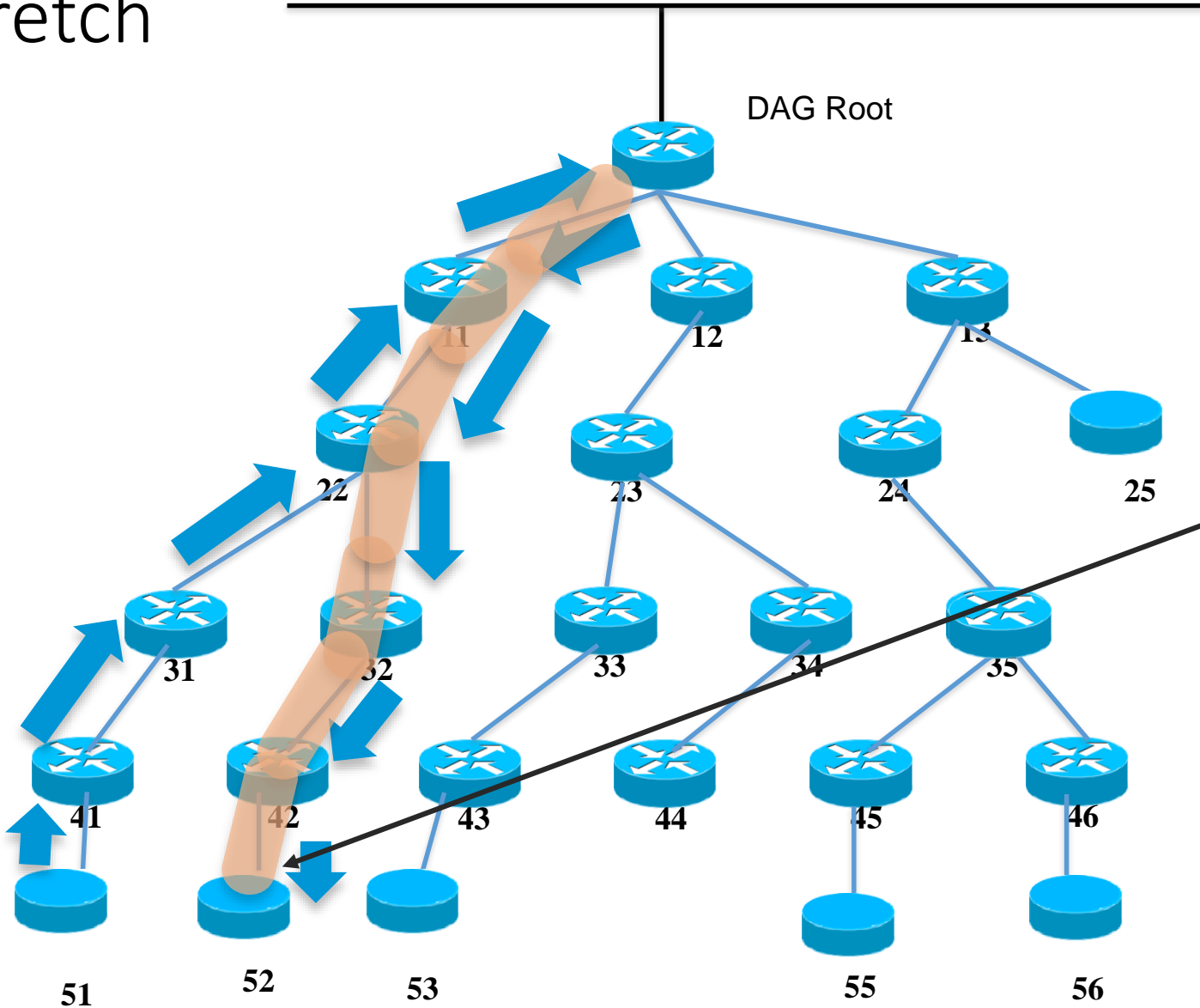
| Src: Root |
| Dest: 52 |
| RPI |
| Via: 11 |
| Via: 22 |
| Via: 32 |
| Via: 42 |
| Src: X |
| Dest: 52 |
| RPI |
| Stuff |

| Src: 51 |
| Dest: 52 |
| RPI |
| Stuff |

11
12
13

22
23
24
25

31
32
33
34
35

41
42
43
44
45
46

51
52
53
55
56

Non-Storing Routing stretch Alt (RAN)

Application Server D

DAG Root

Src: Root
Dest: 52
RPI
Via: 11
Via: 22
Via: 32
Via: 42
Src: X
Dest: 52
Stuff
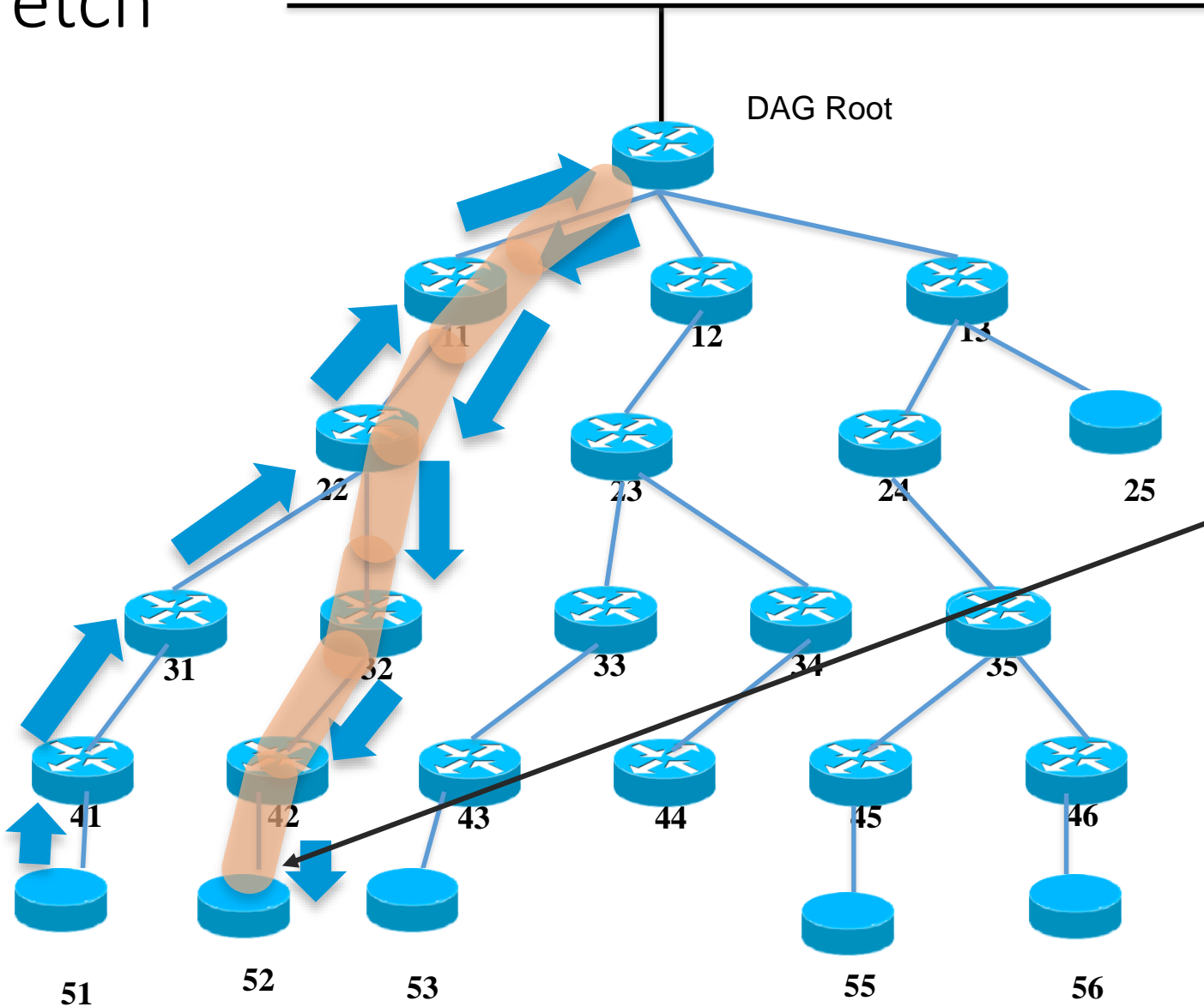
Src: 51
Dest: Root
RPI
Src: 51
Dest: 52
Stuff

11 12 13

22 23 24 25

31 32 33 34 35

41 42 43 44 45 46

51 52 53 55 56

Any Mode from RUL To *
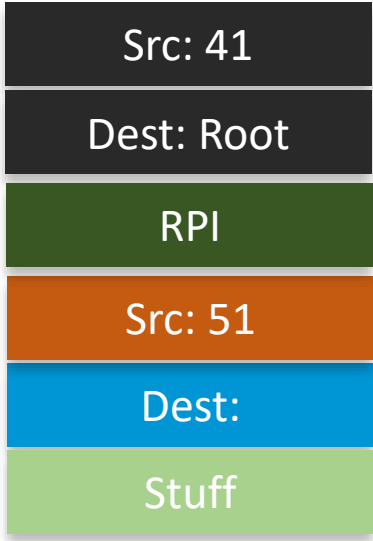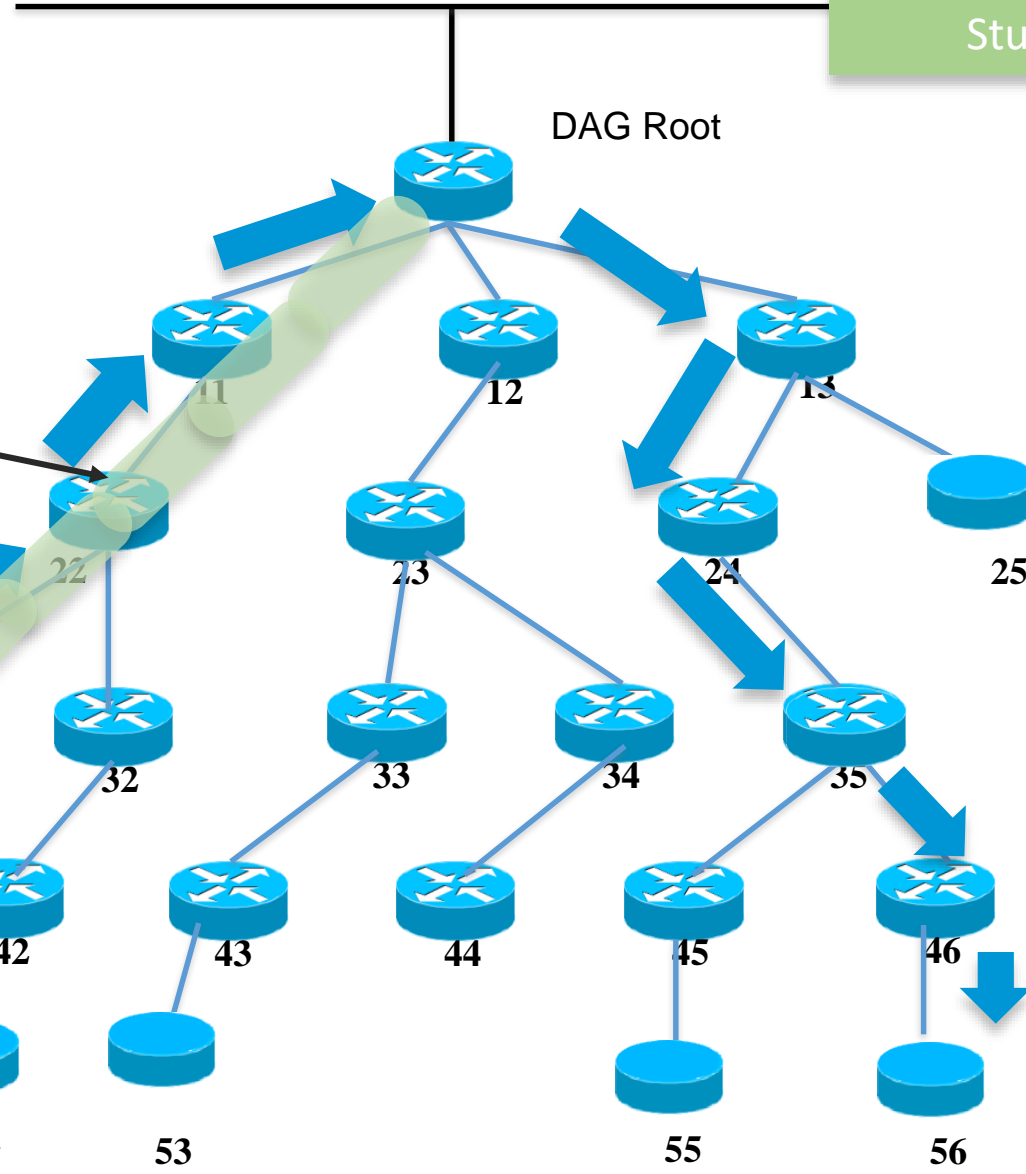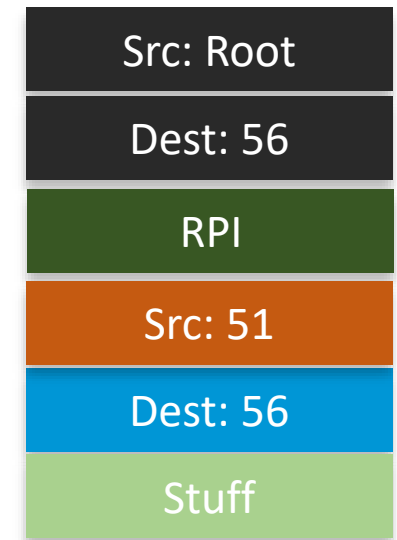
e.g. Storing to RAN

Application Server D

| Src: 51 |
| Dest: Internet |
| Stuff |

| Src: 41 |
| Dest: Root |
| RPI |
| Src: 51 |
| Dest: |
| Stuff |

| Src: 51 |
| Dest: |
| Stuff |

| Src: Root |
| Dest: 56 |
| RPI |
| Src: 51 |
| Dest: 56 |
| Stuff |

DAG Root

11 12 13
22 23 24 25
31 32 33 34 35
41 42 43 44 45 46
51 52 53 55 56

Storing Mode To RUL

RUL addresses injected in non-storing mode so packet flies to the Root which encapsulated
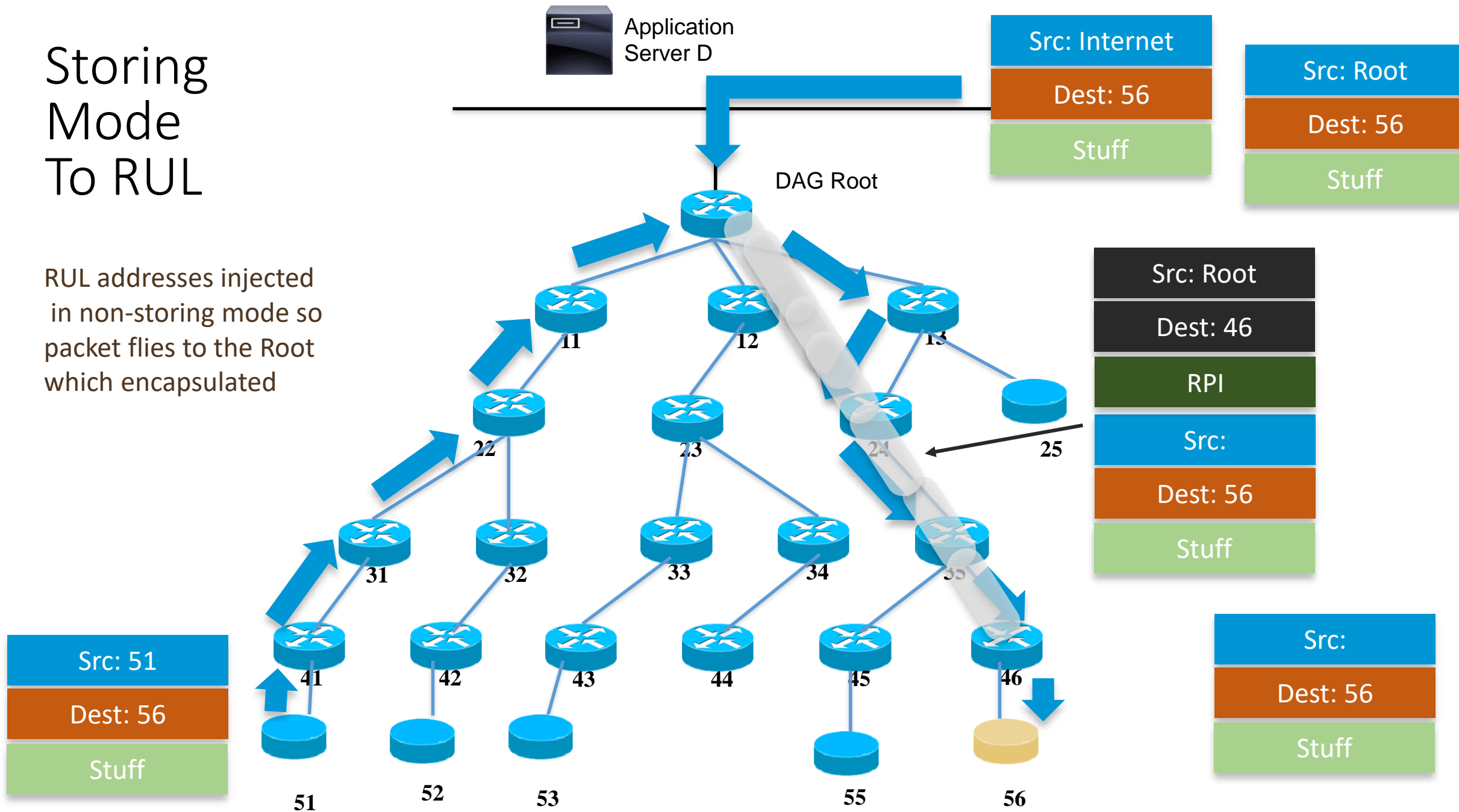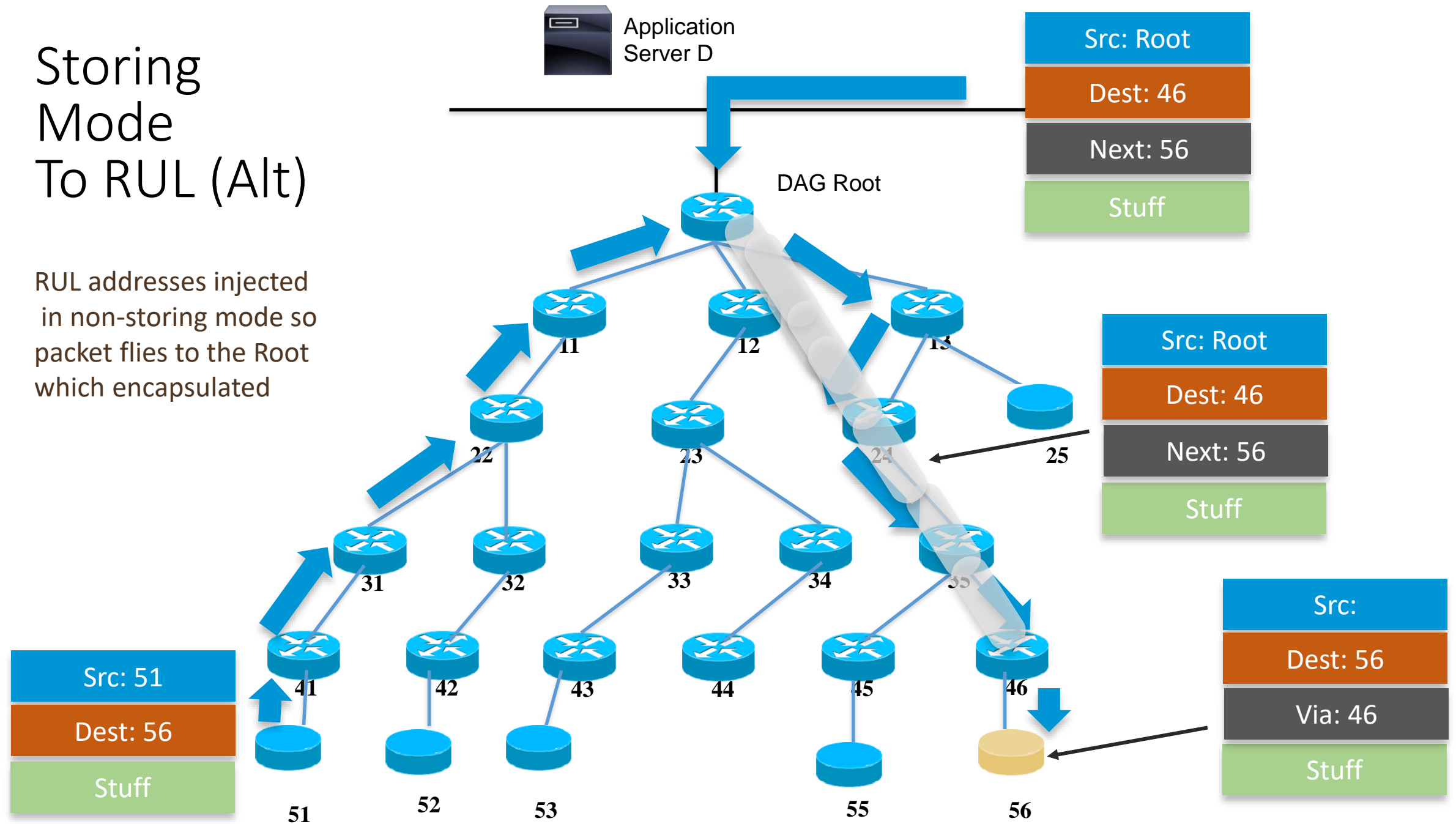
Storing Mode To RUL (Alt)

RUL addresses injected in non-storing mode so packet flies to the Root which encapsulated

Non-Storing Mode To RUL

RUL addresses injected in non-storing mode so packet flies to the Root which encapsulated