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Deprecated Network Prefix Provision

- draft-jhlee-dmm-dnpp-00 -

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Motivation (1/2)

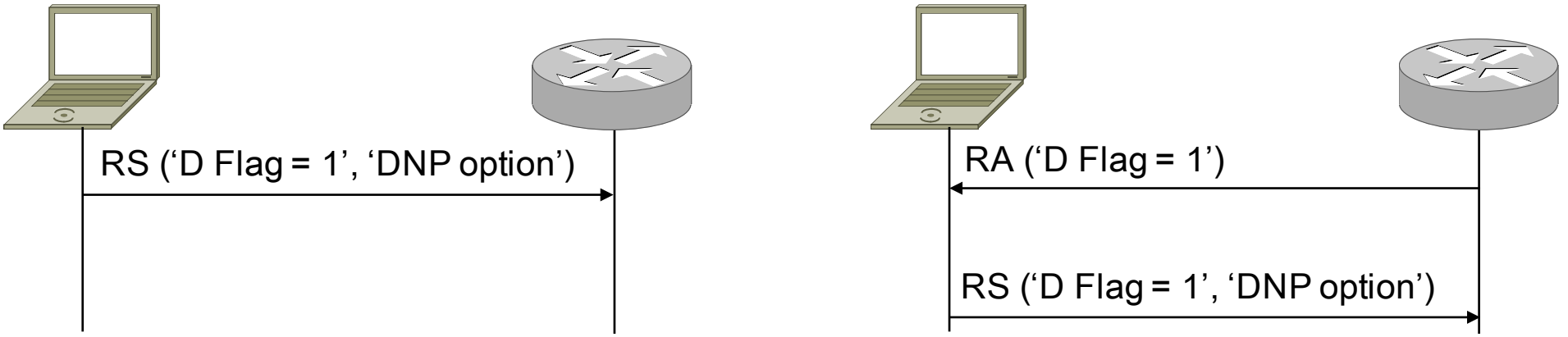
- NDP does not specify how an AR obtains the deprecated network prefix information from an MN
  - MN may use its deprecated address (i.e., previously confi gured address at the previous network) for communications at the new network of the AR
    - MN uses the *deprecated address only for keeping communi cations already established* at the previous network
    - MN uses the *preferred address for new communications*

Motivation (2/2)

- Without knowing the deprecated network prefix
  - Ingress filtering may filter all packets with the deprecated address of the MN
  - AR may cannot establish a bidirectional tunnel with the previous AR for the packets with the deprecated address
- If the deprecated network prefix is known to the AR
  - Ingress filtering rule can be updated
  - Bidirectional tunnel can be established

Proposal

- New extensions to RS and RA messages
  - RS message
    - Extended to include the deprecated network prefix option
  - RA message
    - Extended to quickly receive the RS message including the deprecated network prefix option



‘DNP option’ contains
1) ***MN’s deprecated network prefix(es)***,
2) ***etc***

Next Steps

- Specify the flag and DNP option formats
- Specify the security consideration

Thanks!

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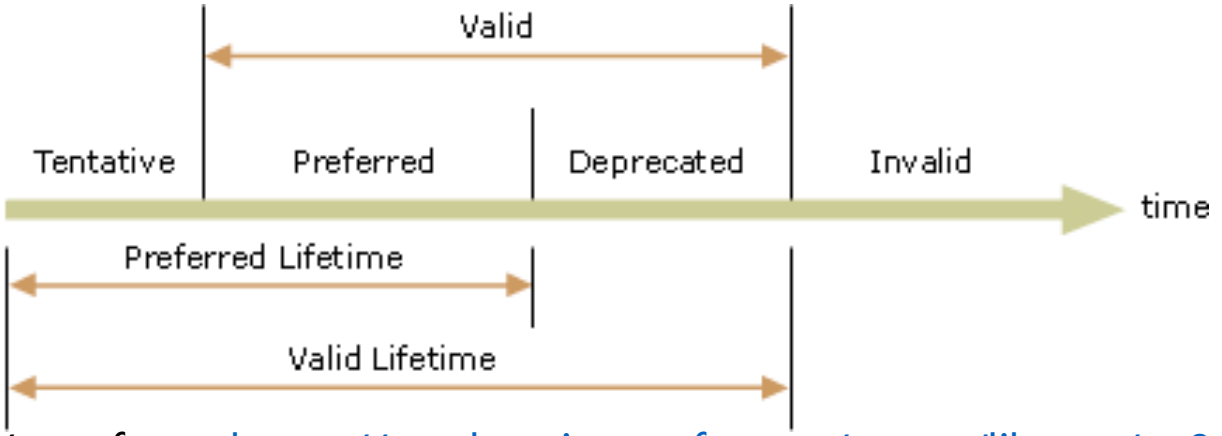
Backup: Address States

- Autoconfigured address states



Image/text from https://msdn.microsoft.com/en-us/library/aa917171.aspx

- Valid: The address can send and receive unicast traffic. This state covers both the preferred and deprecated states
- Preferred: The address has been verified as unique. A node can send and receive unicast traffic to and from a preferred address
- Deprecated: The address is still valid, but using it for new communication is discouraged. Existing communication sessions can continue to use a deprecated address. A node can send and receive unicast traffic to and from a deprecated address