

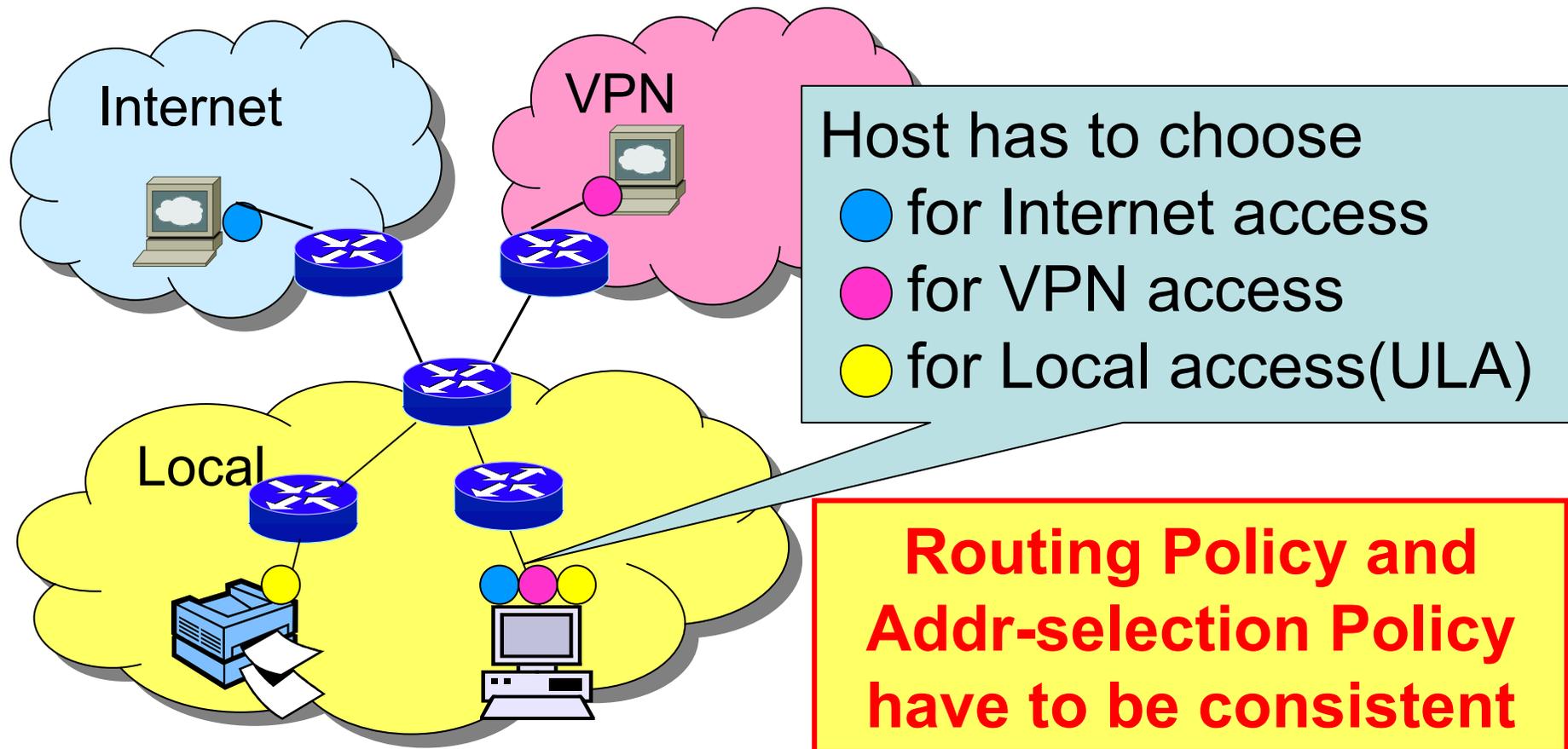
Distribution of Address Selection Policy using DHCPv6

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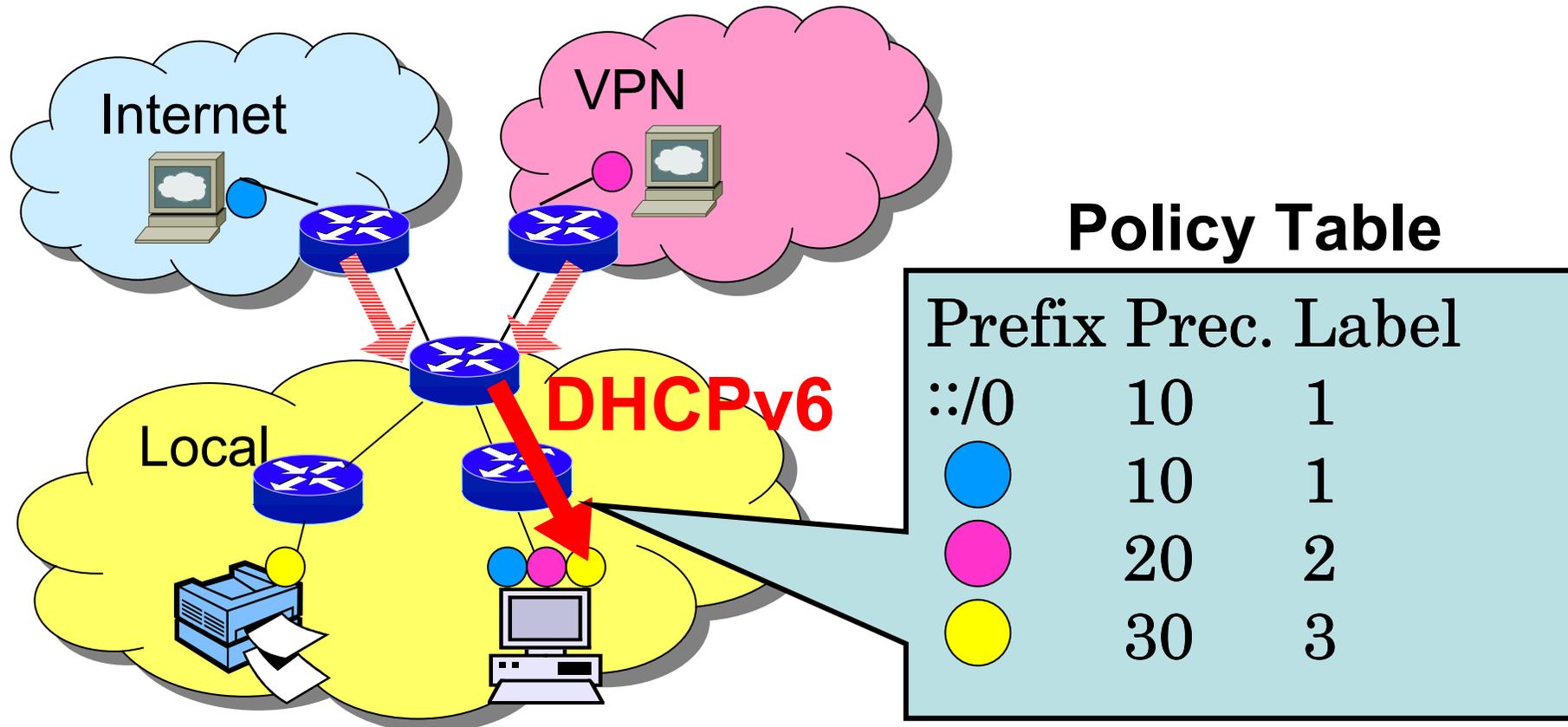
Background

- Every network has its own design and routing policy
- Host's address selection policy is uniform in every environment



Our Proposal

- RFC3484 Policy Table provides a powerful mechanism for address selection config.
- Policy Table auto-config. helps many cases



When this is necessary ?

- **In many cases when a host has multiple addresses, such as IPv6, IPv4 and ULA.**
 - **source address selection**
 - Ingress Filtering Problem
 - Half-Closed Network Problem
 - Combined Use of Global address and ULA
 - Smooth Site Renumbering
 - Multicast Source Address Selection
 - **destination address selection**
 - IPv4 or IPv6 prioritization
 - ULA and IPv4 dual-stack environment
 - ULA or Global prioritization

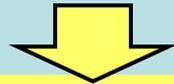
Detailed in [draft-arifumi-v6ops-addr-select-ps-01.txt](#)

Standardization Status

We are working on parallel jobs

- **Get support from ipv6 community (v6ops)**

- Problem statements
[draft-arifumi-v6ops-addr-select-ps-01.txt](#)
- Requirements for address selection policy distribution
[draft-arifumi-v6ops-addr-select-req-00.txt](#)



These 2 drafts became WG item on monday

- Evaluate solutions for address selection

- **Develop a spec. (dhc)**

- v6ops isn't a place for making protocols
- So, in dhc we are brushing up specification.
[draft-fujisaki-dhc-addr-select-opt-02.txt](#)
- and standardize it with inputs from v6ops

Discussion

about DHCP-specific issues

- **Lifetime of Policy Table**
 - What kind of lifetime it should have ?
 - When the address changes, policy should also change accordingly.
 - Should be same as DNS server info's lifetime ?
 - This issue isn't documented in RFC3646.
- **IA-Option usage should be mandatory ?**
 - For reliable transport and lifetime management
 - Or, stateless-DHCP with lifetime option is Okay ?
- **Multi-Interface environment have to be considered, if this becomes an DHCP option RFC ?**
 - Surely policy tables can conflict. However, this isn't only true for this option. How about DNS server option ?
 - A lot of Oses seem to have "one default interface".
- **Any other considerations ?**

**Q. Do you think this proposal is
mature enough ?**

Thanks !