

Lightweight 4over6: An Extension to DS-Lite Architecture

draft-cui-softwire-b4-translated-ds-lite-11

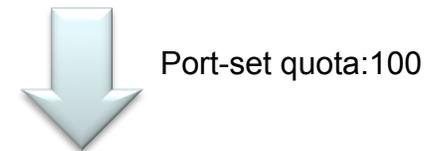
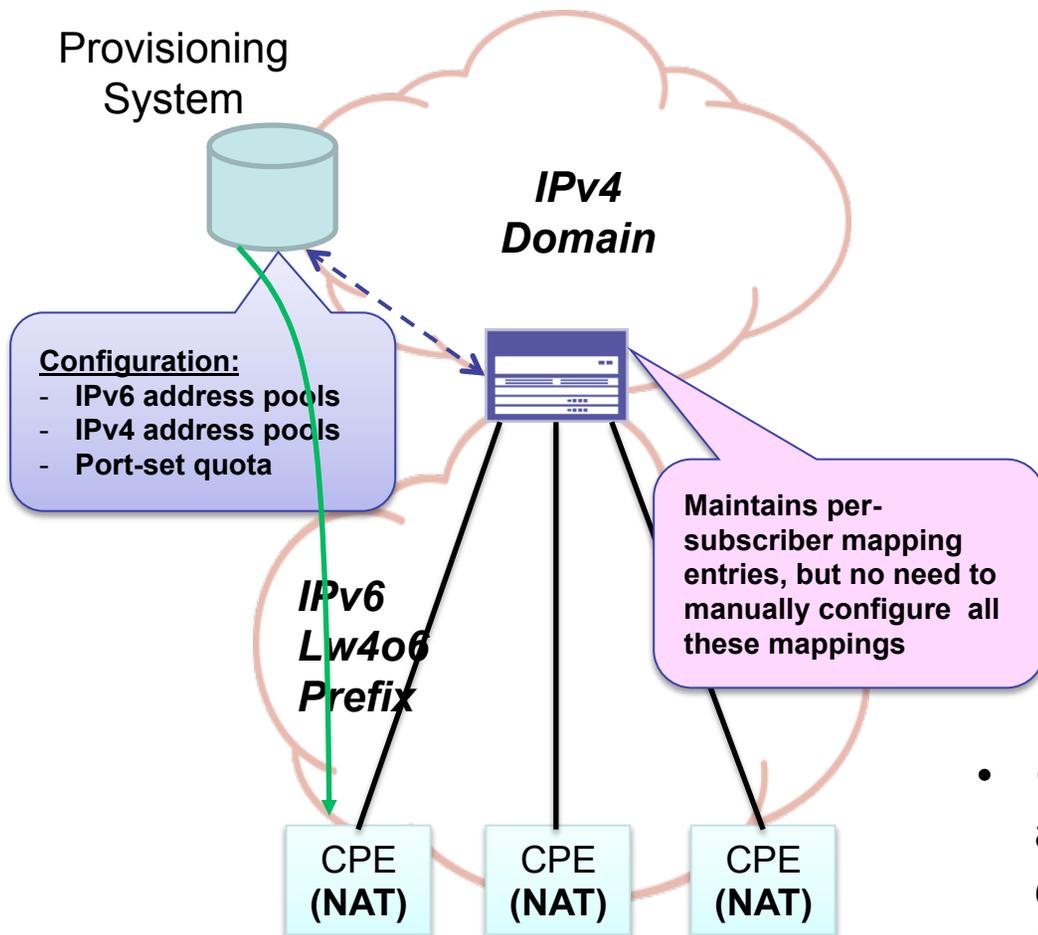
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Overview of Lightweight 4over6

- A simple extension for DS-Lite
 - The Binding approach described in the unified CPE draft
- Per-subscriber state maintenance on AFTR
 - Good scalability for overwhelming traffic; easy/no logging
- No IPv4/IPv6 address coupling
 - Operation simplicity: no extra requirement on address planning
 - Flexible port management: on-demand/pre-configured IPv4 addr + port-set provisioning
- DS-Lite backward compatibility

Self-determined mapping in lw4o6



210.0.0.1	2001:20::1	[301~400]
210.0.0.1	2001:20::2	[401~500]
210.0.0.1	2001:20::3	[501~600]

- Operators have full flexibility on addressing planning and configuration.
- Subscribers can simply retrieve the port-set+IPv4 address.

Outcome of IETF-85

- WG guidance on next step
 - A new draft describing a ‘unified’ software 4o6 CPE (incl. MAP and lw4over6)
 - Lw4over6 can move forward based on unified CPE
- A successful interop demo at the BnB event
 - including five participants from Huawei, Tsinghua, GreenNet, China Telecom, Yamaha



Updates from -09

- Specify the relationship of lw4o6 and unified CPE
- Simplify the CE configuration parameters part by giving a reference to the section 2.2 of unified CPE
- Modify the lwB4 Provisioning by referencing to unified CPE
- For port-set algorithm, add a reference to unified CPE and MAP.
- Substantial edits.

Update Test/Trial

- We have published the source code on:
 - <http://sourceforge.net/projects/laft6/>
- We already have run field trial/test in:
 - China Telecom, Deutsche Telekom, CERNET2, Freebit
- We already have conducted Interop test among five participants:
 - Huawei, Tsinghua, GreenNet, China Telecom, Yamaha
- We already have commercial products from
 - lwAFTR: Huawei, Juniper
 - lwB4: Fiberhome, Yamaha
 - Other vendors are also implementing it...

Next Steps

- The current version reflects the requirements of the WG
- The implementation and trial result are good
- Call For Workgroup Adoption?