# Lightweight 4over6: An Extension to the DS-Lite Architecture

draft-ietf-softwire-lw4over6-12

I. Farrer (Presenter)

#### **Current state**

- Submit draft-ietf-softwire-lw4over6-12
- Update -12 to incorporating changes reflecting AD review, GEN-ART comments and resolving IESG DISCUSSes
- Two DISCUSSes from IESG:
  - Ops Area (Benoit Claise )
  - SecDir (Kathleen Moriarty)
- A complete list of all of the comments & changes can be found at:
  - http://www.ietf.org/mail-archive/web/softwires/ current/msg06175.html

## **OPS AD Review (Benoit)**

- How to achieve interoperability if each implementation can choose different provisioning mechanisms?
  - Agreed the following text is added to section 7:

"To prevent interworking complexity, it is RECOMMENDED that an operator uses a single provisioning mechanism / protocol for their implementation. In the event that more than one provisioning mechanism / protocol needs to be used, the operator SHOULD ensure that each provisioning mechanism has a discrete set of resources."

## Secdir Review

- Require explanation of why well-known ports are not allocated
  - Agreed to add text following text to Sec 5.1:

"The system ports are more likely to be reserved by middleware, and therefore we recommend that they not be issued to clients other than as a deliberate assignment. Section 5.2.2 of [RFC6269] provides analysis of allocating well-known ports to clients with IPv4 address sharing."

- ICMPv6 error message may cause DoS attack
  - Agreed to add text following text to Sec 5.1:

"On receipt of such an ICMP error message, the lwB4 MUST validate the source address to be the same as the lwAFTR address which is configured. In the event that these addresses do not match, the lwAFTR MUST discard the ICMP error message. In order to prevent forged ICMP messages using the spoofed lwAFTR address as the source being sent to lwB4s, the operator can implement network ingress filtering as described in [RFC2827]."

### SecDir Review

- Require discussion of provisioning mechanism security
  - Agreed to add text following text to Sec 9:

"This document describes a number of different protocols which may be used for the provisioning of lw4o6. In each case, the security considerations relevant to the provisioning protocol are also relevant to the provisioning of lw4o6 using that protocol. lw4o6 does not add any additional provisioning protocol specific security considerations."

- Require the discussion of additional port space after the initial assignment
  - Agreed to add text following text to Sec 5.1:

"DHCPv6 based provisioning does not provide a mechanism for the client to request more L4 ports, Other provisioning mechanisms (e.g. PCP based provisioning) provide this function."