

Lightweight 4over6 Transition MIB

draft-zhou-softwire-lw4o6-mib-00

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Overview

- Essentially an extension of the (old) NAT-MIB [RFC 4008]
- Modeling port restricted IP address assignments following draft-bajko-pripaddrassign-04
- Designed to be used with draft-cui-software-b4-translated-ds-lite-07

interface table extension for error handling

```
--lw4o6Mib(1.3.6.1.2.1.XXX)  
  +--lw4o6Objects(1)  
    +--lw4o6IfTable(1)  
      +--lw4o6IfEntry(1) [lw4o6IfIndex]  
        +-- --- InterfaceIndex lw4o6IfIndex(1)  
        +-- rwn Bits lw4o6IfIcmpControl(2)  
        +-- r-n Counter32 lw4o6IfBindingMatchFailures(3)  
        +-- r-n Counter32 lw4o6IfNoBindingFailures(4)
```

binding table for portrange / portrandom bindings

```
--lw4o6Mib(1.3.6.1.2.1.XXXX)
  +--lw4o6Objects(1)
    +--lw4o6BindTable(2)
      +--lw4o6BindEntry(1) [lw4o6BindIfIndex,lw4o6BindIndex]
        +-- --- InterfaceIndex lw4o6BindIfIndex(1)
        +-- --- BindingIndex lw4o6BindIndex(2)
        +-- r-n Enumeration lw4o6BindType(3)
        +-- r-n InetAddressIPv6 lw4o6BindIPv6Address(4)
        +-- r-n InetAddressIPv4 lw4o6BindIPv4Address(5)
        +-- r-n Integer32 lw4o6BindPortRangeValue(6)
        +-- r-n Integer32 lw4o6BindPortRangeMask(7)
        +-- r-n Integer32 lw4o6BindRandomFunction(8)
        +-- r-n Integer32 lw4o6BindRandomStartingPoint(9)
        +-- r-n OctetString lw4o6BindRandomKey(10)
        +-- r-n Integer32 lw4o6BindNumberOfPorts(11)
        +-- r-n Gauge32 lw4o6BindNumberOfPortsUsed(12)
        +-- r-n Counter32 lw4o6BindPortAllocationFailures(13)
```

Observations

- Needs to align with the NAT-MIB work happening in BEHAVE
- Unclear where the various pieces of NAT-MIB work will find a home