# IPv6 Address Assignment to End Sites
## draft-narten-ipv6-3177bis-48boundary-05.txt

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# Background

- Document last discussed in Dublin
- WG asked a number of questions...
- But also agreed to take on as work item
- No action on spec for too long...
- Recently received multiple queries about its status
- Went back and reviewed the Dublin session discussion
- Issued revised -05

# Purpose of Document

- Update 3177 based on where we are today
    - Some of the arguments no longer hold
    - Clarify what is architectural vs. operational
    - Clarify and reaffirm the key motivations and principles behind original recommendation
- Reaffirm to RIRs key concerns:
    - End sites should get multiple subnets
    - Allocations should consider longer time frames for growth (decade)
    - Renumbering into fewer bits (smaller subnet) is painful and doesn't need to happen

# Changes since -04

- New text:
    - Made clear that giving out /128s is not recommended
        - Sites are by definition multiple devices...
    - Made clear: no hard boundaries between /64 and /48 (not a return to "classful addressing")
    - State clearly: old recommendation of single, default of /48 for all sites is no longer recommended
- Added principle:
    - Intention is to give sites enough space, and that means more than a /64 in most cases
    - Intention is that End Sites not feel pressure to use address conservation techniques (e.g., NAT66) because they can't get space they need.

# Changes (cont.)

- Added text showing that savings in overall address space consumption could be reduced by 2 orders of magnitude if /56 were used compared to /48

- Text not carried over from 3177:

  - Multihoming discussion (superceded by Multi6 work, multiple RFCs published) [1.5 pages]

  - Conservation of Address Space section [1.5 pages]

    – Argues that /48 is not a problem with analysis that there is lots of space

    – Misses the point: some people feel that /48 is simply too much and not justified.

# Next Steps

- Do recent changes address previous concerns?

- What other changes/updates are needed?

- Reissue as WG document

# Questions/Comments?