

Is HD ratio mechanism too complex?

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Issues?

1. While discussing 2011-04 some comments were sent to the AP-WG mailing list that:
 1. Were very important
 2. ...but are out of the scope of 2011-04

Today's topic:

“The HD ratio and additional IPv6 allocation policy...”

Comments from AP WG mailing list

“Still, having the "initial request" policy being severely more relaxed than the "additional request" policy poses looming problems for those who will have to request more address space later on. But it's a step into the right direction...”

Comments from AP WG mailinglist

“The problem is that the "additional allocation" policy is far more draconian than the "initial allocation" policy.

HD ratio doesn't matter for the initial alloc, but for any additional alloc.”

Show of hands...

Please raise your hand if you completely understand the HD ratio

Possible question?

If I get a /29 and use a /30 for some weird transition mechanism (that is by definition not entirely using the whole /30), up to what percentage do I need to fill up the remaining /30 to meet the HD ratio requirement for an additional allocation?

HD ratio...

$$T = 2((56-P)*HD)$$

Prefix	Total /56s	/56s HD 0.94	Util %
27	536870912	160722871	29.94
28	268435456	83774045	31.21
29	134217728	43665787	32.53
30	67108864	22760044	33.92
31	33554432	11863283	35.36
32	16777216	6183533	36.86

The answer

You need to use 32.5% of the /29

Which is 65% of the /30 that is not wasted by the weird transition protocol...

How tight must my address planning be to achieve that?

Discussion...

- That was just an example – but other situations might be no better.
- Do we want less restrictive HD ratio?
- Do we agree with HD ratio at all?
- Who will work on this? Do we need to work on this at all?