

Considerations for Assigning a new Recommended DSCP

Ana Custura, Gorry Fairhurst, Raffaello Secchi

`draft-ietf-tsvwg-dscp-considerations-05`

TSVWG IETF-115

Changes in -03 and -04

- Request to mention RFC3086
- Added clarifications, including "NOTE: More than one mechanism could result in the same DSCP remarking (see below)".
- Changed the measurement term "pathology" to the more neutral term "observed remarking behaviour".
- Various editorial updates.
- Revision 04 was last-called

Issues in WGLC 1/3

- *Clarify last section of 4.2.2 - example remarking by ToS Precedence Bleach #67*
- *Update text on RFC2474 and unknown codepoints #65*
- *Add/quote text from RFC2474 on the use of the DSCP field #66*
- *s/Questions to guide discussion/Considerations to guide discussion/#63*
- *Change sentence in 6.4 to clarify what can lead to remarking #62*
- *Change “behaviour” to “model” when discussing MPLS #60*
- *Avoid giving the impression that all observed pathologies are consistent with, compliant with, and/or motivated by the Diffserv architecture #59*
- *Clarify the scope of Network Control Traffic in section 3.2 #58*
- *Fix terminology and tenses #57*
- *s/A DiffServ node associates/DiffServ associates/ #56*
- *Remove DSCP 5 as allocated to NQB #55*

- *Above are all included in editor's copy.*
- *Still to do: in section 6, cover all observed behaviours #61*

Issues in WGLC 2/3

- Intent of DS architecture relative to IP Precedence/ToS issue understood issue understood, new text pending #45

New text:

For example, the DSCP re-marking corresponding to the ToS Precedence Bleaching (/Bleach-ToS-Precedence/) observed behaviour described in section 4 can arise for various reasons, one of which is old equipment which precedes DiffServ. It can also arise in the case of traffic conditioning by DiffServ routers at operator boundaries, or misconfiguration.

Example A)

Classify on: 010xxx -> Rewrite to: 000xxx ignore and maintain the value xxx

Example B)

Classify on: 010000 -> Rewrite to: 000000

Classify on: 010001 -> Rewrite to: 000001

Classify on: 010010 -> Rewrite to: 000010

Classify on: 010011 -> Rewrite to: 000011

Classify on: 010100 -> Rewrite to: 000100

Classify on: 010101 -> Rewrite to: 000101

Classify on: 010110 -> Rewrite to: 000110

Classify on: 010111 -> Rewrite to: 000111

Issues in WGLC 3/3

What about the IANA PHBID Code Registry defined in RFC3140?

<https://www.iana.org/assignments/phbid-codes/>

The registry has 4096 codepoints

2 decades later, none have been allocated.

We expect to leave this to another draft to deal with :-)

Next Steps

- Resolve remaining issues and revise ID
- Ask shepherd to progress along publications process