The DCCP Service Code

draft-ietf-dccp-serv-codes-04

Presentation to DCCP WG

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Comments

Changes in rev -04

Little change on SC *main part* since last IETF.

Cleaned English (removing duplication)

- Responded to comments from WG.

- Moved hash text to section 2.7

Debate about whether to keep "Benchmarking Services" in I-D

- Decided not to split this off to another I-D

Updated IANA Section on Ports and SC

- Inputs from ad-hoc meeting at IETF-70

Thanks for comments from:

Mark, Magnus, Colin, Tom, Lars

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Security Considerations for Benchmarking (5.3)

Services used for benchmarking and testing may also be used to generate traffic for other purposes. They can therefore pose an opportunity for a Denial of Service attack.

Care needs to be exercised when enabling these services in an operational network.

Appropriate rate-limits should be provided to mitigate these effects.

In this respect the security considerations are the same as those for other IETF-defined transport protocols.

IANA Considerations
(19.8 RFC 4340)

Service Codes are allocated FCFS

This updates RFC4340 in the following way:

"The IANA MAY assign new Service Codes without seeking Expert Review using their discretion, but SHOULD seek expert review when a request seeks an appreciable number of Service Codes (e.g. more than five)."

Aim: Easier SC assignment, but avoid excessive requests.

Server Ports

"IANA should normally assign a value above 1024-49151 to a DCCP server port.

IANA allocation requests to allocate port numbers in the Well Known Ports range (0 through 1023), require Expert Review prior to allocation by IANA [RFC4340].

Requests for registered ports in the range 1024-49151, do not normally require Expert Review."

Aim: Easier port assignment (tbc by WG)

Server Ports

IANA MUST NOT allocate more than one DCCP server port with a single Service Code value.

The set of Service Code values associated with a DCCP server port should be recorded in the registry.

Aim: Clarification.

Port Reuse

A request for additional Service Codes to be associated with an already allocated Port Number requires expert review.

These requests will normally be accepted when they originate from the contact associated with the port registration.

In other cases, these applications will be expected to use an unallocated port, when this is available.

Aim: Avoid unexpected consequences.

Portnames <-> SC

"A port name may be generated from the Service Code value represented in hexadecimal, e.g. SC:fdpz corresponds to the port name '0x6664707a'."

Does not preclude reusing a Portname already defined in another registry

Aim: Portname is required, but appears to have the same basic role as a SC.

Would be good to link these, but SC's are not necessarily ASCII.

Server Ports Registry Example

ServName	Port	SC	ASCII	Description	Reference
0x6664707a	7	1717858426	fdpz	Frobodyne Plotz Protocol	[RFCWXYZ]
0x4543484f	7	1162037327	ECHO	Echo service	[RFC862]
0x4454494d	13	1146374477	DTIM	Daytime server	[RFC867]
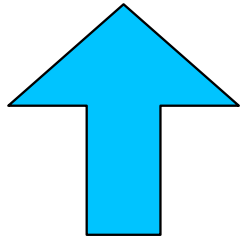
ServiceName
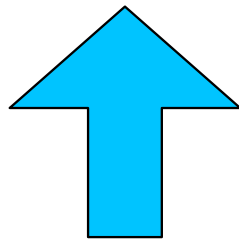
Service Code

To-Do

The IANA procedures need to be confirmed.

- How do these relate to Michele Cotton *et al*, draft?

Specify portnames for requested ports in 6.3.1.

Draft should then be ready for WGLC