PPSP Tracker Protocol

draft-ietf-ppsp-base-tracker-protocol

PPSP WG

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Recap: Protocol Overview

- The Base Tracker Protocol uses three messages for the operation:

  - **CONNECT** message to "register" the Peer (on first usage) and to request actions, i.e., join or leave, on swarm(s) of streaming contents;

  - **STAT-REPORT** message to periodically inform the Tracker about its status and supply statistic information;

  - **FIND** message to request peer list updates from the Tracker;

- To terminate all its activity in the P2P streaming service the Peer may:

  - Send a **CONNECT** requesting action to LEAVE swarm(s);
  - Stop sending periodic **STAT_REPORT**;

Changes to 05 version

- Reviewed by Fei Song, Roni Even, Yunfei Zhang, Arno Bakker.

- Changes since last IETF meeting
  - Add the definition of address type.
  - Suggest to return a DEFAULT value number from the peer population if no PeerNum attributes are presented or PeerNum=0 in the CONNECT or JOIN request.
  - Suggest to use most significant octet first when using binary encoding.
  - Other editorial changes.

Issue# Decide the DEFAULT Value

- Solution 1: A fixed value? E.g. 10
  - Different systems have different scales. What if the total number of peers is less than the DEFAULT value?
  - Experiments should be taken to decide a representative fixed DEFAULT value.
- Solution 2: Maximum peer number?

Issue# Encoding Problem

- ## Should a encoding standard be used?
  - Currently, using C language syntax similar to TLS [RFC5246].
  - Arno suggests to use XDR [RFC4506].

- ## Should UNICODE be used for internationalization?
  - Current draft doesn't specify the character encoding because there's no complex characters involved.
  - It seems it's better to specify UTF-8 as the character encoding.

Examples of C language description but using Generalized Types:

– *ppsp_tp_string_t*

– *ppsp_tp_integer_t*

- In case of implementation in XML

    – a) *ppsp_tp_string_t* -> **String**
      Example of element: "<ASN>AS1234</ASN>"

    – b) *ppsp_tp_integer_t* -> **Integer**
      Example of element: "<Priority>10</Priority>"
      Example of attribute: "... priority='10'"

- In case of implementation in binary

    – *ppsp_tp_string_t* -> **char ***
      Example: "AS1234\0"

    – *ppsp_tp_integer_t* -> **uint8_t**
      Example for Priority value: 0x0A

    – *ppsp_tp_integer_t* -> **uint16_t**
      Example for Address Port value: 8088

Next Steps

- **Move Draft to WGLC?**