

# PPSP Tracker Protocol – Extended Protocol

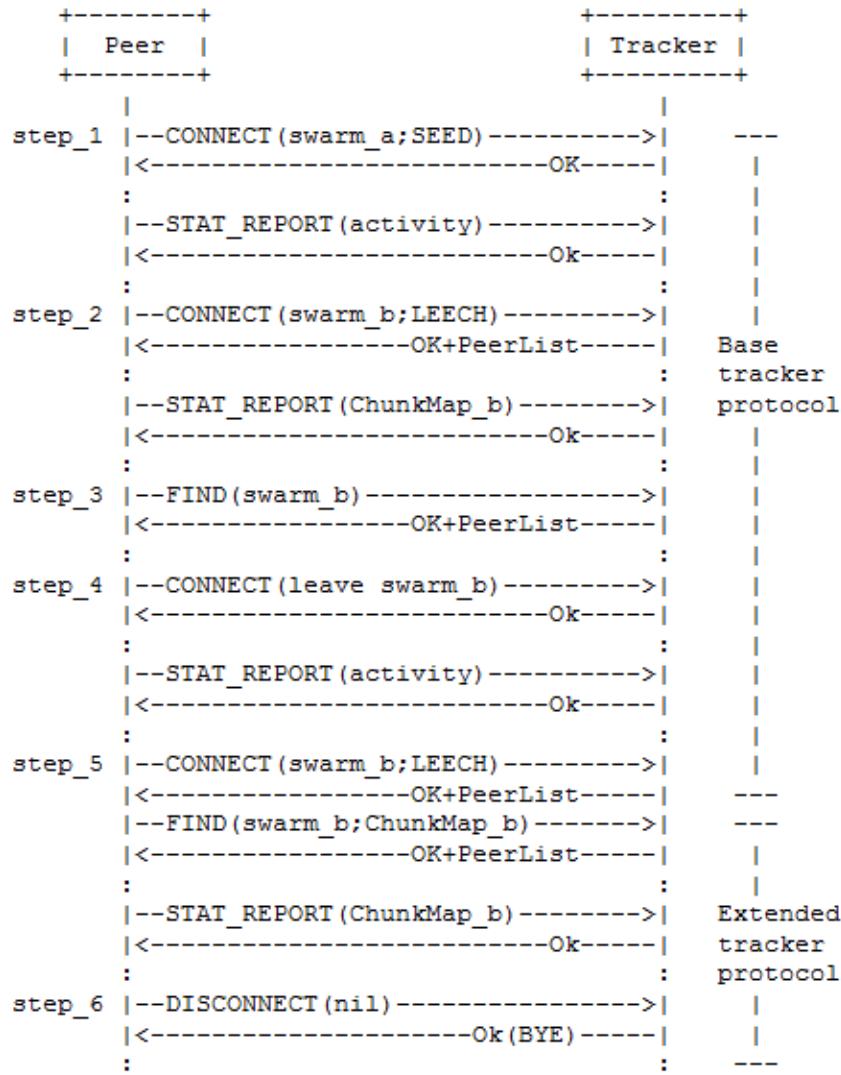
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Rachel Huang,  
Rui Cruz, Mário Nunes,  
João Taveira,  
Lingli Deng

# Document Status

- Reviewed by Fei Song and Yunfei Zhang.
- Changes since last IETF meeting
  - Adjusted the example and descriptions of usages of the extended request messages.
  - Extended ppsp\_tp\_version\_t which is omitted in last version
  - Modified the description of Section 5.3, compatibility with base tracker protocol.
  - Other editorial changes.

# Extended Tracker Protocol Overview



- 2 Enhanced Messages derived from PPSP-TP/1.0
  - FIND: specific chunks of a content information.
  - STAT\_REPORT : content information
- 1 optional messages
  - DISCONNECT: disconnect from the tracker and leave the system

# Compatibility with Base Tracker Protocol

- Peer (with extended protocol) vs Tracker (with base protocol) .
  - The tracker would respond the peer with Bad Request.
  - The peer MUST switch to the messages of base protocol to interact with the tracker when receiving Bad Request.
- Peer (with base protocol) vs Tracker (with extended protocol)
  - The tracker is able to handle all the requests from the peer.

It is RECOMMENDED to implement the extended protocol in trackers.

# Chunk Addressing Method (CAM)

- Multiple CAM are supported.
  - identical with peer protocol.
  - Could be extended in the future.
- Only one method **MUST** be used when a peer communicating with tracker.
- Peer **MUST** obtain the CAMs supported by the swarm in advance.
  - How? Out of scope. E.g., from the web portal.
- The tracker is **NOT RECOMMENDED** to serve a swarm when it can't support one of the swarm's CAMs.
- The peer is **NOT RECOMMENDED** to join a swarm when it can't support any of the swarm's CAMs.
- If a tracker doesn't support the CAM in a request, it could directly ignore the content related information.

# CAM Issue

- Who decides the CAMs for a swarm?
  - Content provider. It is decided when the content published to the web portal.
- Is there any use case that needs to convert from one CAM to another?
  - Currently, no conversion mechanisms are considered both in peer protocol and extended tracker protocol.
  - There's no need for extended tracker protocol to support conversion mechanisms, because at least one CAM could be supported by both peer and tracker.
  - For peer protocol, “And all peers in one swarm MUST use the same chunk addressing method”. If they don't support the one the content provider selected, they are out of luck. (Arno)

# Next Step

- Ready for adoption?
- Question?

**THANK YOU !**