

A PPSP Tracker Usage for Reload

draft-xiao-ppsp-reload-distributed-tracker-01

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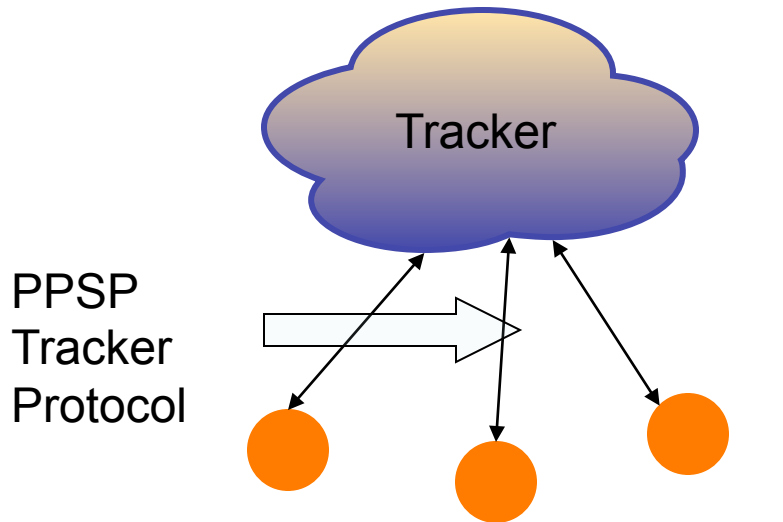
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Xuan Tai

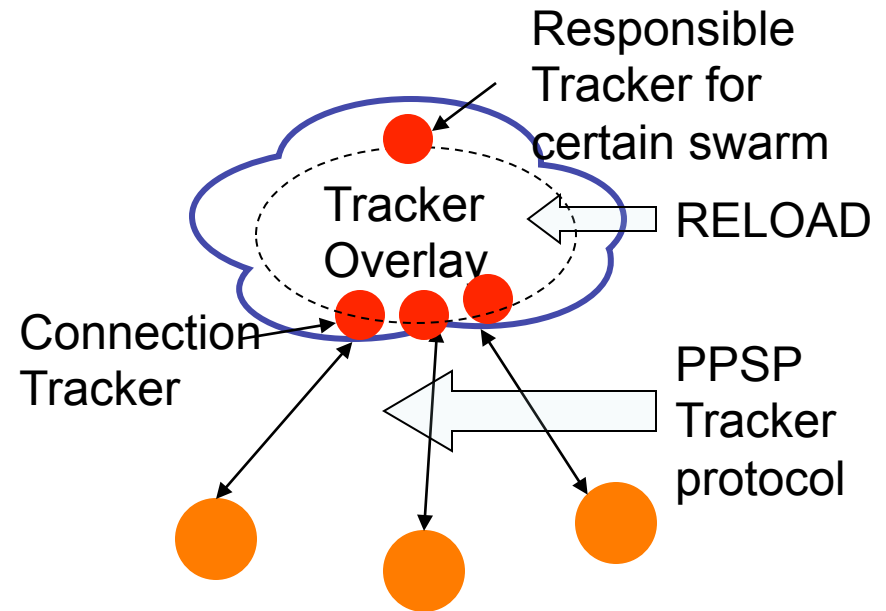
Introduction

- PPSP assumes a centralized tracker
- Logically centralized 'tracker' could be geographically distributed cluster
- Increase content availability, service robustness and the network scalability or reliability
- Trackers are managed by RELOAD
- Invisible to PPSP peers

Where RELOAD is used



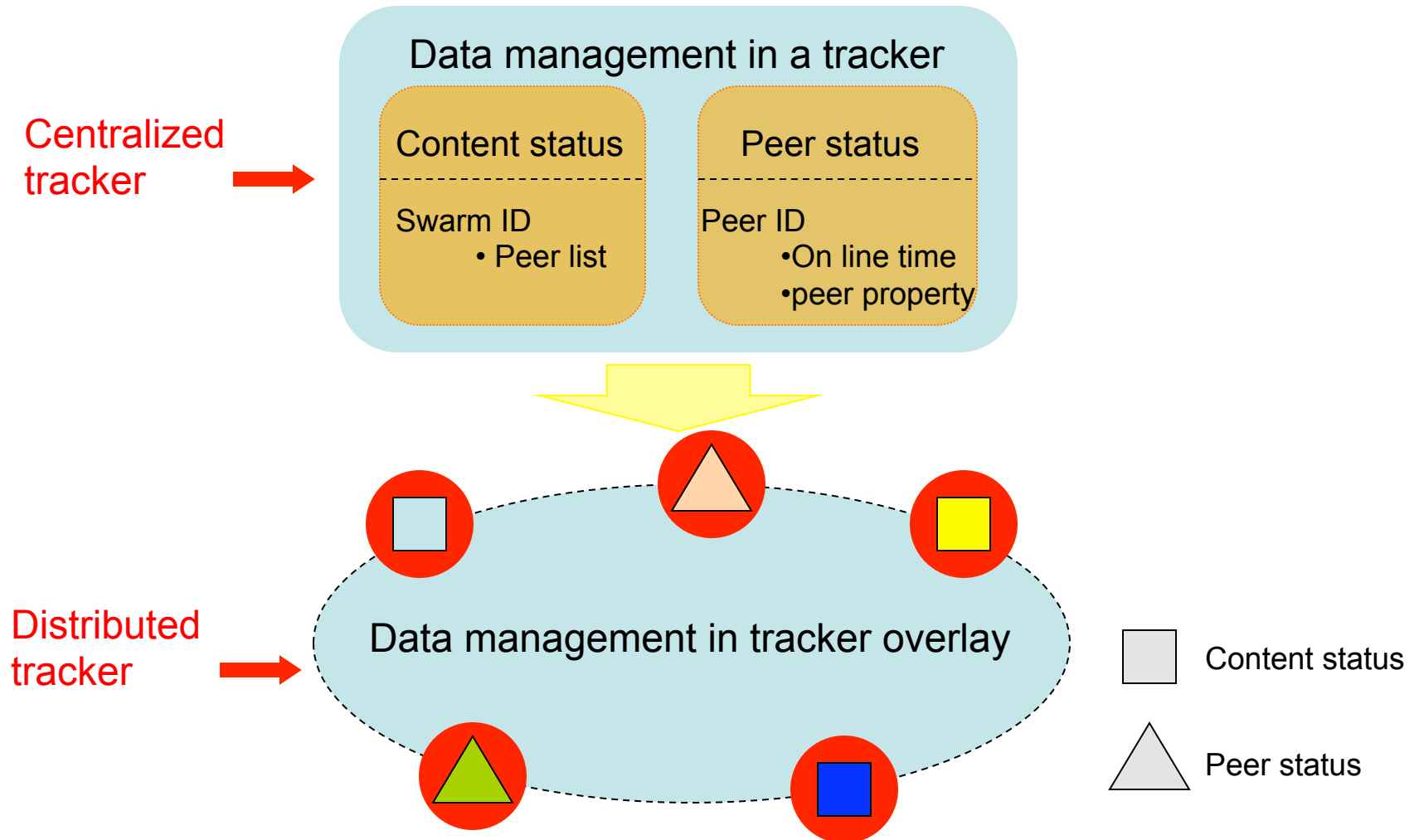
Appears as a centralized tracker from outside



Distributed trackers are organized as an overlay

No change to PPSP Tracker Protocol !

Two kinds of information



Content/channel Information Registration and Lookup

- Send PPSP message “Join” to a local connection tracker with a swarm-ID. (How to find the particular local connection tracker is out of scope)
- The tracker overlay uses RELOAD to find the responsible tracker and store the registration
- The responsible tracker handles the request and send the result back to the local connection tracker by RELOAD message "StoreReqAns".
- Local connection tracker responds to the PPSP Peer by a corresponding PPSP message: "Successful (OK)" or some error messages
- The process flow for content lookup is almost the same

Peer Status Registration, Update and Lookup

- Peer status information may be used to select which peers to connect to
- **Open issue 1: where to put the Peer Status?**
 - **PPSP Peer itself or Tracker overlay?** (related to tracker protocol and peer protocol)
 - Assume at least some static peer status is stored in tracker overlay.
- **Open issue 2: how to put the Peer Status in Tracker overlay?**
 - **In swarm tracker? Or independent?** In all tracker? Connection tracker? Or responsible peer status tracker(mapping relationship between tracker ID and peer ID)
 - Maybe the combination of some option: e.g., in both peer status tracker and connection tracker. Peers from the same connection tracker have higher priority
 - Depend on implementation?