4.2. Appointment Card Protocol Overview

Our proposed ACP protects original requesters when they are served by LBSPs. A user (Agt_1) generates his own Appointment Cards (ACs) containing his own identity called Cid and a unique number called $Capt$ (a number generated by the creator of AC). The ACs are exchanged when two users encounter each other. When the original requester sends a query, he chooses an AC and sends the query using the identity Agt_1 of the first agent which is in the AC. The LBSP replies to Agt_1 when it receives the query. Agt_1 is the one who has generated the AC and the first agent of the AC. Agt_1 then forwards the reply to the next agent (Agt_2) who already has received AC from him, and so on until the reply reaches the last agent. The last agent is responsible for forwarding it to the original requester.

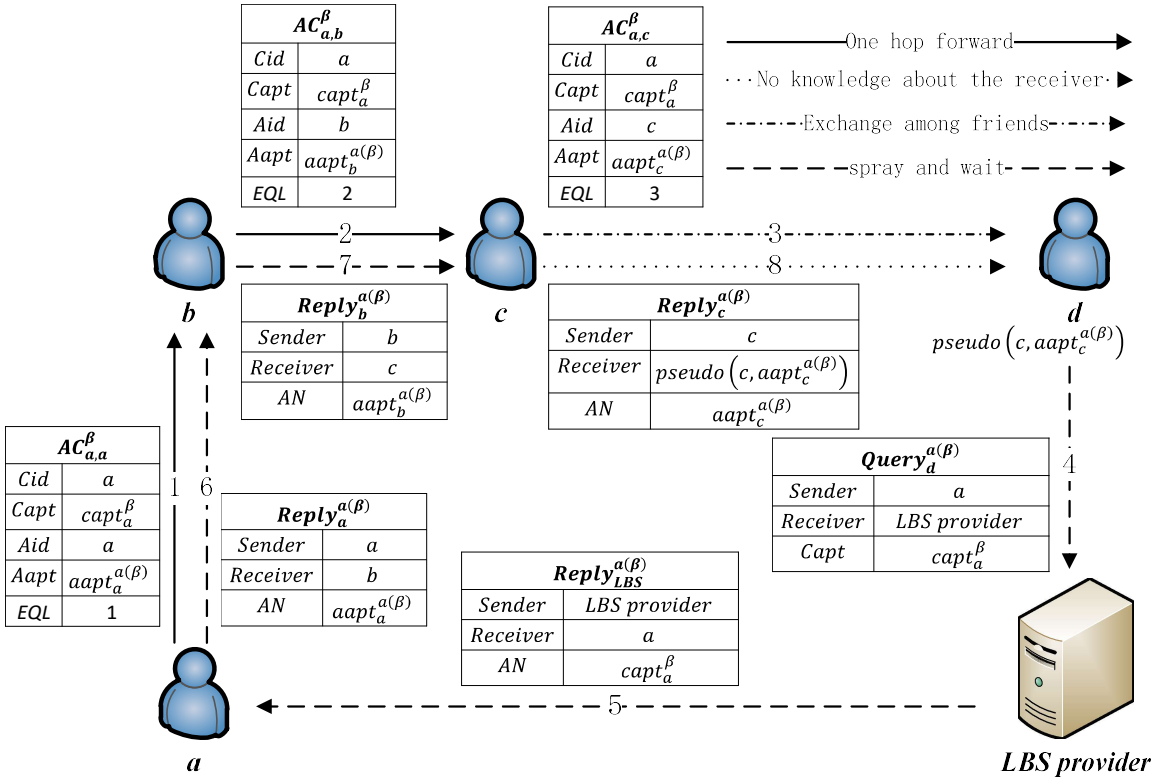

Figure 4.1: Example of ACP Message Exchange

The Figure 4.1 is an example of the execution of the ACP protocol. Explanations of the