Analysing mobility options of data communication

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Mobility plays very important role in the data communication. The trends are estimated extremely high number of mobile hosts in the next three years. Despite the barriers the demands are to apply the same applications as the fix hosts are used. It means we can find the mobility options in every layer of architectures (Internet/IPv4-6, SS7, ISDN/ATM).

In first part we prepare a comparative study about mobility protocols and their options (most critical features) of existing mobile data communication systems (paging, RDS, SDS, MDN, RDN, PLMN and DLMN). These systems are constructed by using the stacks of protocols, in the hierarchy minimum four layers (physical, data link, network and application) are involved in mobility.

Second part deals with modelling of hand-over, secure tunelling, roaming and cellular mobile data service used the Hierarchical Message Sequence Chart (HMSC) protocol description tool. It is suitable both for preparation of short protocol overview and both detailed communication behaviour description. This activity is valuable for studying and understanding these processes precisely and planning the protocol test suite.

References

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