Summary of encountered Security / Performance / Scalability problems with uPB and Wireless Thin Client Architecture

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Abstract:

The computation power, memory, storage and network resources of modern mobile terminals are comparable to those of personal computers ten years ago. The resources apparently allow using the recent mobile terminals as thin client or even clients with richer functionality. Thin client architecture would allow fast service deployment and subscription. The mobile phone is still limited in energy consumption and network connectivity. The user expects some basic functionality also in case of no network connectivity at all or very limited bandwidth. The mobile terminal should support some offline operation. The non-continuous connectivity and off-line operation as well as the distributed architecture will pose new security challenges in particular with respect to availability, integrity and privacy of application data, which mentioned in this report. Portal based solutions have some drawbacks in security, which we discuss.

Keywords: Thin Client, Synchronization, Offline-Operation, Security, Privacy.

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