Mobilität in der kooperativen Wissensarbeit
Entwicklung einer Musterarchitektur für mobil-verteilte Wissensräume

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Starting with the missing link between the disjunct developments of collaborative knowledge structuring and mobile ad-hoc-networks collaborative knowledge structuring in mobile settings becomes an important but often neglected goal of current CSCW research. In a first step approaches to long-term computer-supported mobile collaboration need to be identified. Thus, the identification of scenarios of use is an initial requirement for linking collaborative knowledge structuring and spontaneous networking.

The presented approach is based on the well-established concept of virtual knowledge spaces. These represent flexible, document-centered and group- based collaboration environments. Thus, virtual knowledge spaces are the ideal setting for mobile collaborative knowledge structuring. This work transfers the concept of virtual knowledge spaces into mobile network environments combining them into so-called "mobile-distributed knowledge spaces". For this novel form of knowledge spaces a continuous availability of the persistent collaboration objects is identified as a main technical requirement (offline-availability).

The result is an architecture pattern for mobile-distributed knowledge spaces consisting of several tiers. The tiers are the communication tier, the persistency tier, the abstraction tier and the mobile-distributed knowledge spaces tier. This four-tier architecture transfers virtual knowledge spaces into mobile and spontaneous network environments and thus points out a way to establish mobile knowledge structuring in combination with existing collaboration infrastructures.