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Abstract

The memory constrained nature of mobile devices, such as smart phones, limits the amount of data that can be stored locally. As a result, mobile devices often rely on cellular connections to retrieve application data. Environmental factors, however, can partially or completely restrict cellular connectivity. Autonomic distributed caching mechanisms can be used to allow mobile device networks to self heal by storing data needed across multiple devices, but cannot be applied without a means to determine if devices are within a given range. Moreover, it is hard to identify the best way(s) of mapping application data to device memory to allow devices to self-heal in spite of limited cellular connectivity.

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Index Terms

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Keywords

Bluetooth Distributed Data Caching Memcached M2Blue