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Seamless Context-Aware Services in Converged Mobile- and Enterprise- Networks

Trend Report 2005/2006



CENTER FOR DIGITAL TECHNOLOGY & MANAGEMENT



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Seamless Context-Aware Services in Converged
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Trend Report 2005/2006: Seamless Context-Aware Services in Converged Mobile- and Enterprise- Networks

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Preface

Mobile- and Enterprise Services and their convergence are becoming of increased importance in the near future. They will undoubtedly achieve higher performance and user acceptance as available bandwidths increase (e.g. UMTS, HSDPA, WiMAX, DSL, Cable etc.) and (mobile) device technology achieves better I/O performance and power management.

Context-based services are the next evolutionary step concerning location-based services, nowadays primarily offered by mobile operators or existing as standalone GPS-receiver-based solutions. The new kind of services rely on special information derived from basic sensors and network technology (e.g. location, temperature, luminance, active/idle/offline state of devices) or even presence information such as connection flight time of arrival, traffic jam, meeting date etc. A lot of research has been done to develop context-aware services autonomously capturing the context/state of a person, object or general situation. These are however far from being realized due to the exponential growth in complexity of such services as the amount of context information used increases hence being far from market applicability.

This trend report tries to focus on currently available location- and potential "simple" context-services to be seamlessly available in both "fixed-line" enterprise and mobile networks, building upon existing application frameworks and architectures making use of readily and easily available context information derived from sensor and other network interfaces. Apart from their technical feasibility, potential application scenarios and corresponding business models, hence market applicability and window of opportunity are pointed out in this CDTM trend report.

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