

Harmonization of Position Providers

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ABSTRACT

The lack of a *de facto* standard in indoor positioning has led to the development of a wide variety of technologies. Hybrid systems have been proposed in an effort to increase accuracy, generating the need for a common way of interacting with different types of positioning providers. We address this issue by proposing a model that describes providers in terms of properties related to their performance. The benefit of our approach is a uniform interface that allows frameworks to seamlessly incorporate new technologies. In addition, the most appropriate provider for a given situation can be selected in a transparent manner, based on the required accuracy and power consumption. To illustrate the usability of the model we implemented a prototype, the Global Positioning Module, which combines several commonly used providers.

KEYWORDS: Localization, harmonization, position provider.