

Project:
Federated Smart Spaces

Document:
Federation of urban-scale smart spaces

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The establishment of personal and in-house smart spaces is more and more frequent, and enables new relevant applications and services for final users, ranging from context-dependent resource sharing to synergic exploitation of sensors/actuators (e.g., heating systems that exploit sensors from lighting systems to adapt their coordinated working/maintenance based on people presence).

These “traditional” smart spaces relevantly benefit from their possible federation in case of users/groups with social affinities, for instance because of their common belonging to a social group of interest. In urban environments, that enables the vision of innovative applications among groups of citizens, even when they are moving in the city. Related topics of interest include, but are not limited to:

- exploitation of social relationships to adapt resource sharing and service fruition;
- federation and merging of different smart spaces based on context and with no need of configuration intervention from final users;
- innovative smart urban applications based on federated smart spaces;
- interoperability, scalability, and security aspects over wide and dynamic deployment environments.

Below, you can find an example of a federated content distribution service, which exploits user profiles to suggest and distribute interesting contents between different apartments:

