Abstract
Adaptive agents provide a natural and clean way to deal with heterogeneous, distributed and unpredictably evolving environments, such as Internet. In this paper, we present a model of agents that are able to adapt themselves to their environment by several ways. Using a middleware approach, our agents, called Guest, can run, communicate and move between different multiagent platforms, which are a priori incompatible. Guest agents can also change dynamically their capabilities, based on the concept of plug-ins. To build multiagent applications, Guest agents are able to organize themselves into centralized or distributed hierarchies. These agents can even change automatically their organizational models to adapt to their evolving environment, using metamodeling technique.