DISTRIBUTED ACCESS FRAMEWORK FOR EMBEDDED DEVICE COMMUNITY

This paper identifies the need for multiple clients to concurrently access a device community. A set of embedded devices cooperate via one or more service discovery protocols, such as UPnP, Jini, HAVi or OSGi. We present an approach that encapsulates additional services into a Distributed Access Framework (DAF). The services in DAF are responsible for secure and coordinated access of the distributed devices in the community. The different services of DAF can optionally be implemented and executed on different devices. We specify the DAF and demonstrate an implementation where the devices are organized according to the OSGi specification.

KEY WORDS Distributed service delivery, device management, device access, OSGi.