Presented master thesis is dedicated to creation of DEECo component model supported on Android platform. Enabling distributed system of inter-connected devices to run DEECo framework. For this purpose jDEECo implementation of DEECo component model is ported to Android platform and synchronization solution creating common state is done on top of JGroups toolkit. Possible solutions are presented and implementation of created solution is described. At last demo application showing usage of created framework was developed and evaluated.