Example of Segmented and Distributed Arch Program A simple program samples Timer temperatures, emits a rolling average, Serialization code stores the values. trigger is synthesized for then serves a graph to each intra-node a user client BT readTemp() message-passing boundary binary integer Protocol Timer Timer Deserializer Protocol Serializer trigger trigger sensor The compiler rollingAvg(2) MQ analyzes the BT program and readTemp() readTemp() binary splits it between integer three configured Protocol targets Deserializer integer integer Protocol Serializer binary gateway rollingAvg(2, t) rollingAvg(2) storeValue(t) MQ integer integer integer Intermediate code is built by native compilers and storeValue(t) storeValue(t) showGraph() transactionally deployed to physical nodes integer integer server showGraph() showGraph() wireless application gateway

sensor

router

server

1/31/2017 Network Native