Let’s take a look at devices management model now.

The most obvious thing is that every device has to be referred to specific protocol or network. It’s quite hard to confuse usb-device and onewire-base d one because of their differences in hardware implementation. There is no way to plug iButton tablet in usb socket without external adapter.

Therefore, every device is belonged to some network-specific container that is called “NetworkManager”. It controls all the devices of given protocol. For example, we may implement “UsbNetworkManager” instance to manage all the usb-devices.

The others interfaces on the diagram is involved to help and support this management: “ConversionExtension” stands for auxiliary operations of the network, “NetworkSearchPredicate” – for device-search purposes. “NetworkManagerHub” just integrates all the networks into one to simplify their management.