

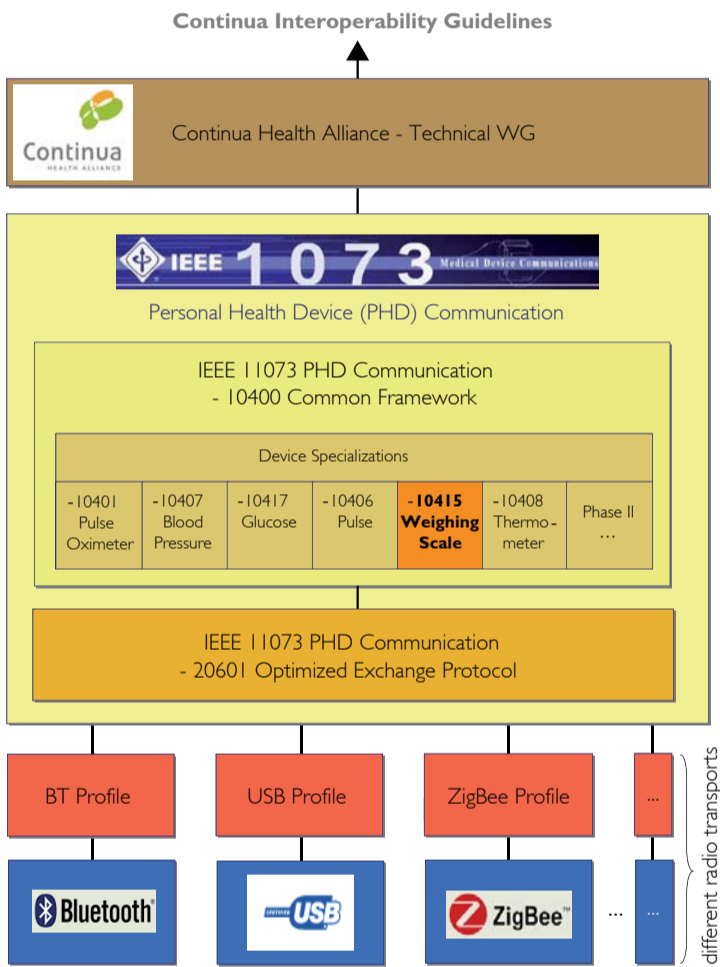
Novel ISO/IEEE 11073 Standards for Personal Telehealth Systems Interoperability

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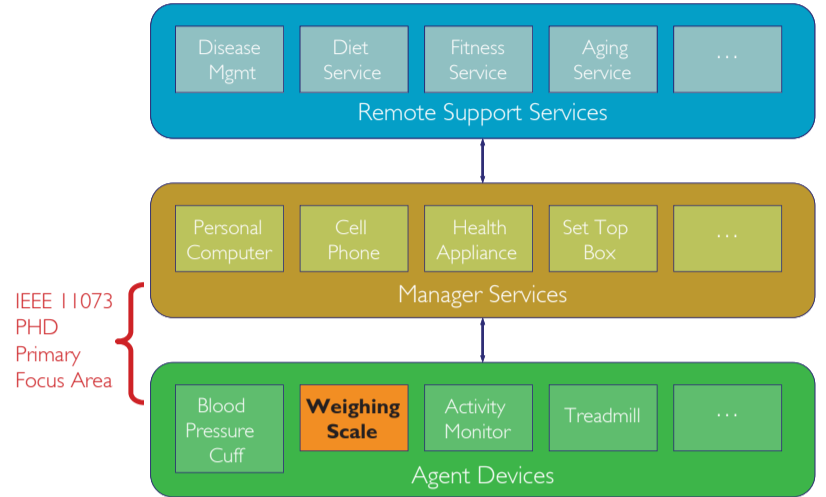
ISO/IEEE 11073 Personal Health Device Communication

- Address semantic application layer interoperability
- Transport-independent application and information profiles
- Between personal telehealth devices (agents) and monitors (managers)
- Leverage existing ISO/IEEE 11073 standards

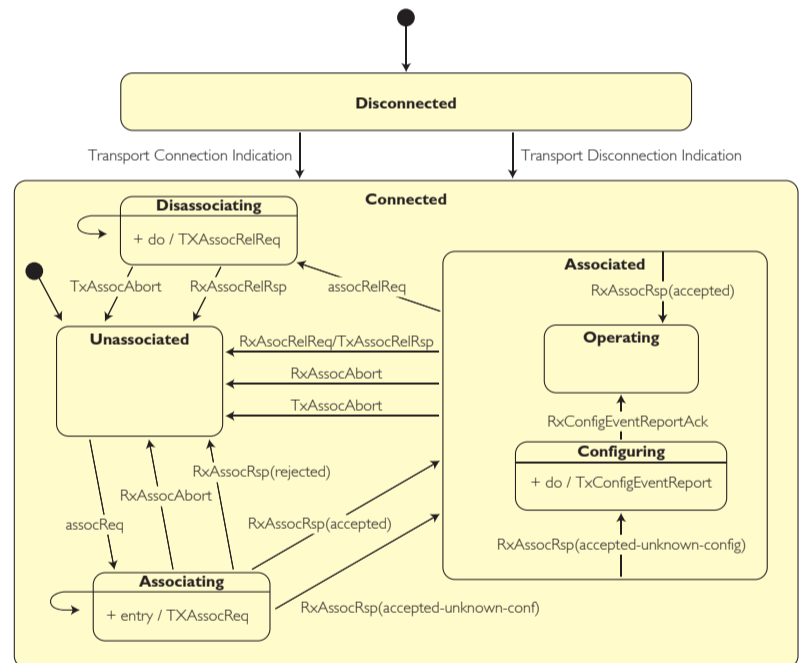
IEEE 11073 PHD in the System Stack



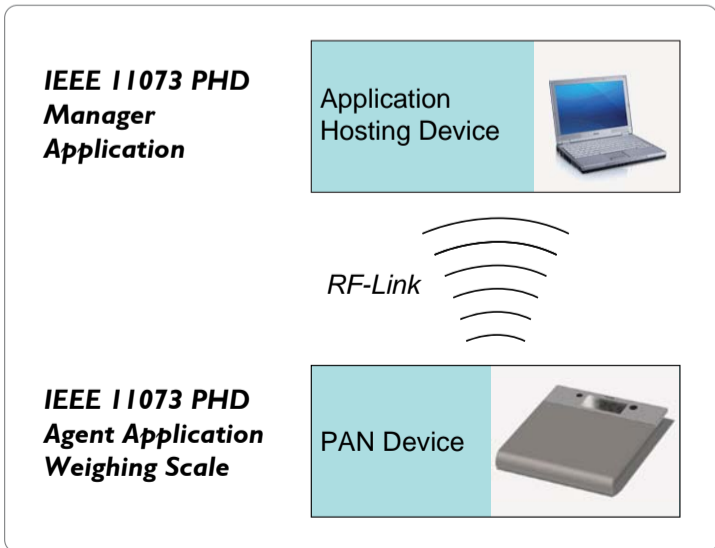
Application Areas and Categories of Use



Agent State Machine Diagram



Prototype Demonstration



PDU size = 86 bytes

Hex	Comment
0xE2 0x00 0x00 0x52	PDU Type / length = 82
0x00 0x00 0x00 0x00	Association protocol Version count = 1 / length = 74
0x00 0x01 0x00 0x4A	UUID identifying the data protocol
0x00 0x5D 0x87 0x40	
0xD5 0xC4 0x11 0xDB	Protocol information length = 56
0xA5 0x6F 0x00 0x02	
0x00 0x38	Data Protocol Version
0x00 0x00 0x00 0x00	Nomenclature Version
0x00 0x00 0x00 0x00	Functional Units
0x00 0x00 0x00 0x00	System Type
0x00 0x00 0x00 0x00	Startup Mode
0x00 0x02 0x00 0x20	Option List count = 2 / length = 32
0x09 0x84 0x00 0x08	Attribute-ID: System-Id / length = 8 (EUI-64)
0x11 0x22 0x33 0x44	System-Id
0x55 0x66 0x77 0x88	
0xFF 0xFF 0x00 0x10	Attribute-ID: Config-Id / length = 16 (UUID)
0x43 0x6F 0x6E 0x74	Config-Id
0x69 0x6E 0x75 0x61	
0x53 0x63 0x61 0x6C	
0x65 0x33 0x30 0x30	

Transaction Example

Protocol Data Unit Example: Association Request