

## SYSTEM LEVEL

Battery group

voltage > threshold

**Normal**

on enter:  
enable GPS

**Low**

on enter:  
disable GPS

voltage < threshold

Base Station group

BS beacon received

&& Nest

**Reachable**

on enter:  
dump log  
on active:  
send readings to the BS

**Unreachable**

on enter:  
activate NotMoving  
on active:  
log locally

timeout

## APPLICATION LEVEL

Health conditions group

normal conditions

**Healthy**

on active:  
create normal beacon

**Diseased**

on active:  
create alert beacon

abnormal conditions

Activity group

Unreachable

**Running**

on active:  
track often

**Nest**

on enter:  
activate Reachable  
on active:  
do not track

**Not Moving**

on active:  
track once

nest coordinates

large

GPS difference

small

GPS difference

**Resting**

on active:  
track rarely

negligible

GPS difference

acceleration

detected