

LUMOR: An App for Standardized Control and Monitoring of a Porcine Lung and its Nutrient Cycle

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> So spannend kann Technik sein.



Österreichs eHealth Event | Wien | 22. - 23. Mai 2014



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Motivation

- EU - funded project: AlveoPic
- previous project: i-Lung
- porcine lung needs physiological conditions!
- nutrient cycle in a mobile circulatory module (mCM)
- Monitoring of mCM: LUMOR



Image Source: http://www.meduniwien.ac.at/homepage/uploads/RTEmagicC_Top_Bild3_01.jpg.jpg

Use Case

- Monitoring the pig lung inside the mCM on a tablet
- via Bluetooth connection
- communication bases on ISO/IEEE 11073 - 20601



Image Sources: <http://picture.yatego.com/images/4a73010416b266.0>,
http://cdn.vectorstock.com/i/composite/26_35/funny-monster-tablet-user-vector-1082635.jpg,
<http://www.manzoni.gov.it/files/users/alberto.facchini/wireless.png>

Motivation

Methods

Demo



Methods

- Message compilation
 - when, what, how often
- mCM Simulator App
 - own test environment
- LUMOR
 - Monitoring and Control Android App

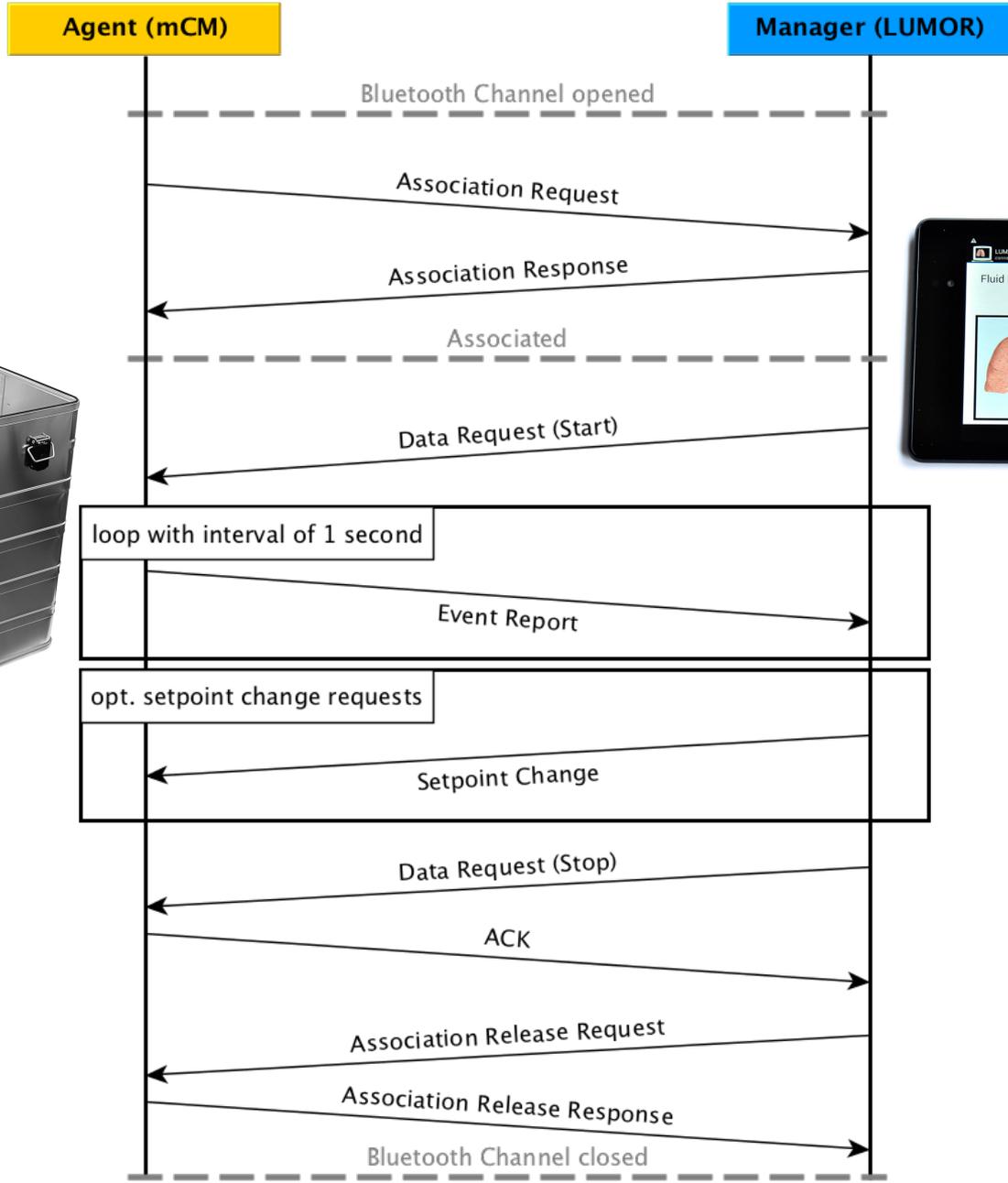
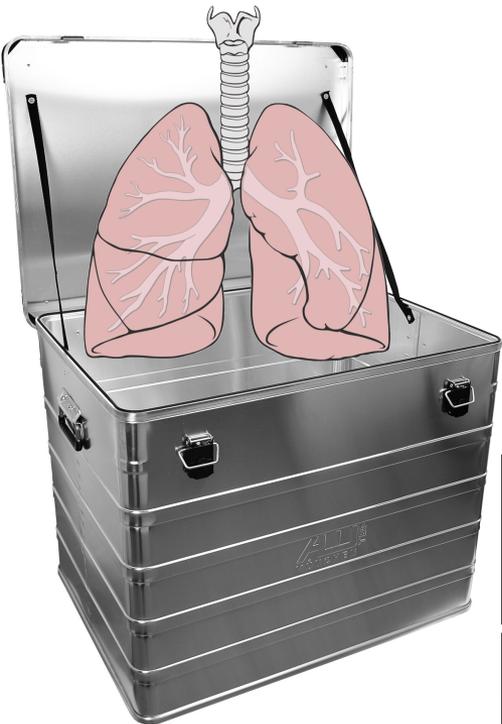
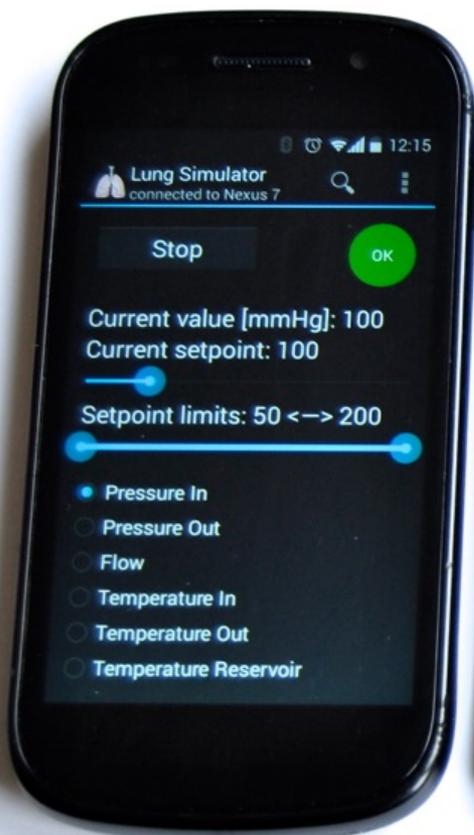


Image Sources:

<http://picture.yatego.com/images/4a73010416b266.0>, https://upload.wikimedia.org/wikipedia/commons/thumb/9/9e/Lungs_diagram_simple.svg/



Acknowledgements

- Brno University of Technology



- European Territorial Co-Operation Austria – Czech Republic



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- Austrian Workers' Compensation Board (AUVA)



- Strategy and Economic Development (Municipal Department 27)



- Leander Mölter and Maximilian Weiss



- National Instruments Germany





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Thank you for your attention!

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