## Workshop

Markus Raab

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#### 1.1 Steps

- 1. In the meeting before the LWS meeting: Give yourselves roles (leader, admin, dev, user, ...). If you missed the meeting, write in the TUWEL forum which role you want.
- 2. Before the LWS meeting: do the preparation as described in this document.
- 3. In the LWS meeting: Create together an architecture that fulfils the goals and present some part of that architecture.

### 1.2 Preparation

Before LWS meeting:

- 1. Read this text.
- 2. Think about what your role represents and what would be important for you.
- 3. Look through materials relevant for the LWS meeting to familiarize yourself with the concepts.
- 4. Search the Internet which technologies are available.

#### 1.3 Goals

We want to design the software architecture of a camera system that:

- 1. is configuration-management friendly
- 2. has transient and persistent configuration consistent
- 3. has correct documentation
- 4. reuses software as much as possible but integrate them nicely

#### 1.4 Requirements

The product manager wants a camera that:

- 1. should be able to take single pictures and streams
- 2. should have pluggable camera modules (lenses, image sensor, ...)
- 3. should have camera profiles for modules of different vendors
- 4. should have a Web-UI that shows all configuration settings
- 5. should support a remote configuration protocol (Web, SNMP, CMs, ...)

#### 1.5 Tasks

- 1. design the architecture of configuration settings
- 2. design the architecture of configuration access
- 3. design how the CM tools should look like
- 4. tracer bullet [1]: explain for one configuration setting the whole way from source to destination
- 5. make decisions (which languages, which software, how to achieve the goals)
- 6. explain how to ensure smooth configuration upgrades
- 7. explain how to provide documentation for operators
- 8. explain how to reuse software

# Literaturverzeichnis

 $\left[1\right]$  Andrew Hunt and David Thomas. The pragmatic programmer. Pearson, 1999.