

# The Polarsys Maturity Model

## Unconference workshop – session 1.

(work in progress)

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Polarsys Meeting  
Ludwigsburg (Germany), October 27th 2014



# POLARSYS

Open Source Tools for Embedded Systems



POLARSYS

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- Accountability by design:  
source code ready for inspection
- Open development:  
development process ready for inspection
- Assessment doesn't need to rely on black boxes:  
absence of information should cause suspicion
- Assessment by third parties is possible:  
methodologies are needed
- A part of the assessment can be automated:  
data sources with detailed, reliable information

# Aims of the model

Taking advantage of open source software & open development:

- Uses publicly available information
- Automates the process as much as possible
- Is transparent itself (model, methodology, software)
- Is flexible, can be adapted, benchmarked

Can be used to:

- assess on maturity for potential users
- improve maturity aspects by projects themselves

# The model as a tool for human experts

The model is intended to be:

- not better than an evaluation by an expert
- as much unbiased as possible
- as much flexible as possible (different targets)
- a good tool / complement for experts
- a help for developers and users

# Objectives

- Cost-effective:  
easy to setup and use.
- Flexible:  
can be enhanced with new data or  
quality requirements.
- Not just evaluation:  
opportunities for understanding and guidance.

## **Ecosystem:**

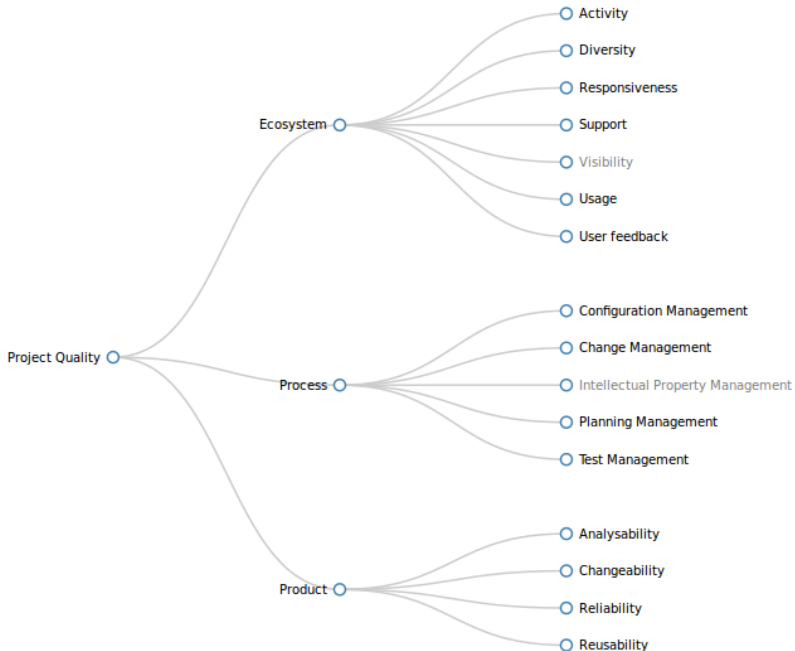
*communities, usage, feedback*

## **Process:**

*predictable outputs, management of KPIs*

## **Product:**

*good practices, maintainability, reliability*





- Activity
- Diversity
- Responsiveness
- Support
- Usage
- User feedback

- Configuration Management
- Change Management
- Planning Management
- Test Management

- Analysability
- Changeability
- Reliability
- Reusability

# The final result

- For each attribute,  
find parameters to characterize it
- Combination of thresholds  
to decide “levels of maturity by attribute”
- Aggregate  
to decide “maturity by dimension”
- Summarise  
to produce a final assesment

Please comment on:

- Specific attributes: add / remove / change them?
- Other dimensions of maturity?
- What to do when information is not available?
- Any other issue that bothers you...