

Tools for Requirements Management

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Assignment 7

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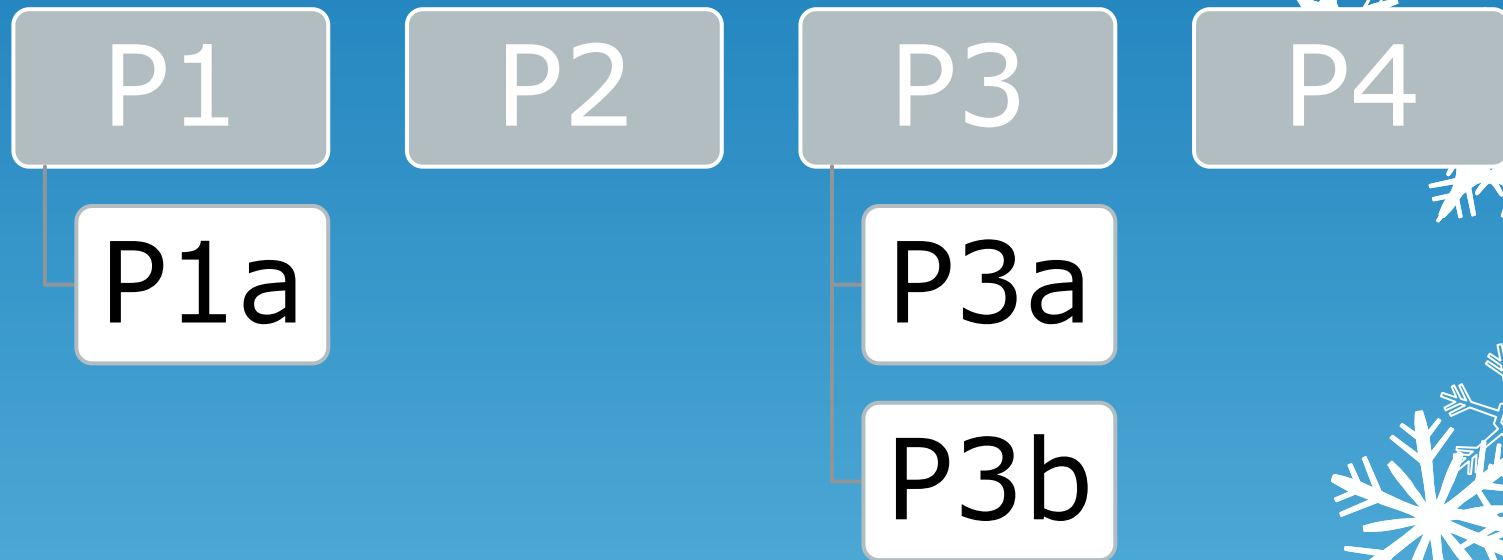


Agenda

- Product line tool requirements
- Modeling requirements
- Product Management requirements
- Tool requirements
- Conclusion



Product line



Commonality

Variability

Tool requirements specific to product lines

- Baselineing of the requirements DB
 - Easily capture the state of several products at once
- Support for multi project/product status & progress reporting
- Tool-based communication among users
- Definition of arbitrary, named subsets of requirements



Modeling requirements

- Shared multi project and multi product information models
- Provide a consistent modeling infrastructure for products in the same product line
- Support variation
 - *Variants must have a first class representation*
 - *Support the variant creation process*
- Multidimensional prioritization of requirements



Product Management requirements

- Product development in a context of a product line
 - Without planned coordination:
 - Multiple implementations of the same requirement
- Dependencies between requirements across products must be provided by requirements engineering
- Coordination of product, project and requirements management is necessary to effectively handle variability in requirements



Top tool requirements

Multi Project,
Multi products
support

Roles &
userspecific
views

Requirements
history
(Tracking)

Traceability

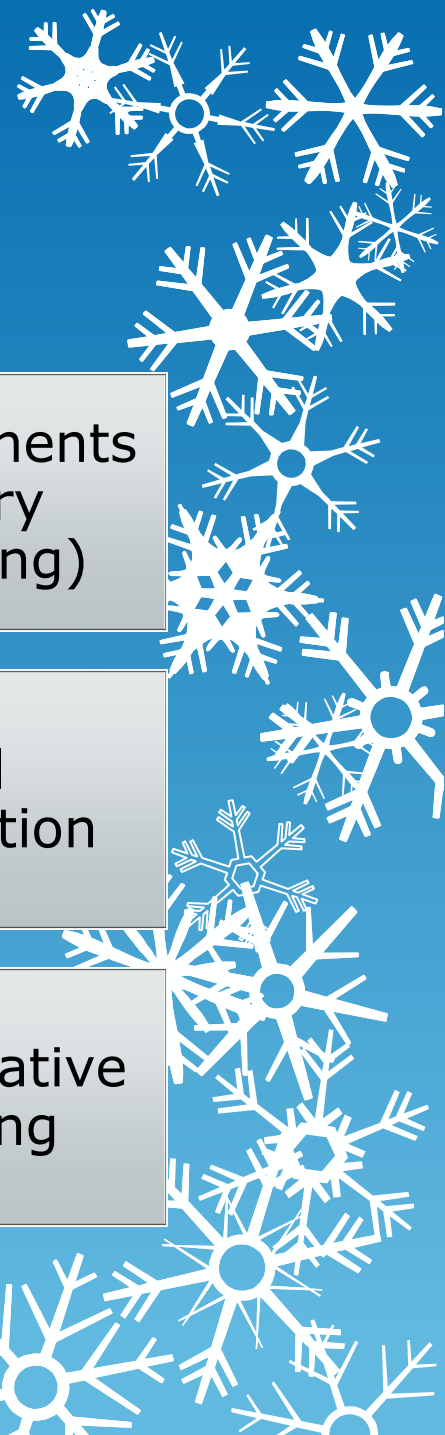
Status &
progress
reporting

Tool
integration

Change
management

Baselining

Collaborative
working



Conclusion

- Today's software product lines have such complex variability that their handling must be supported by tools
- Requirements management of software product lines need systematic approach
- All requirements management tools currently used in industry need to be improved (Beuche 2007)

