How Tagging Supports Informal Processes in Software Development

Christoph Treude, Margaret-Anne Storey
Department of Computer Science, University of Victoria

Motivation
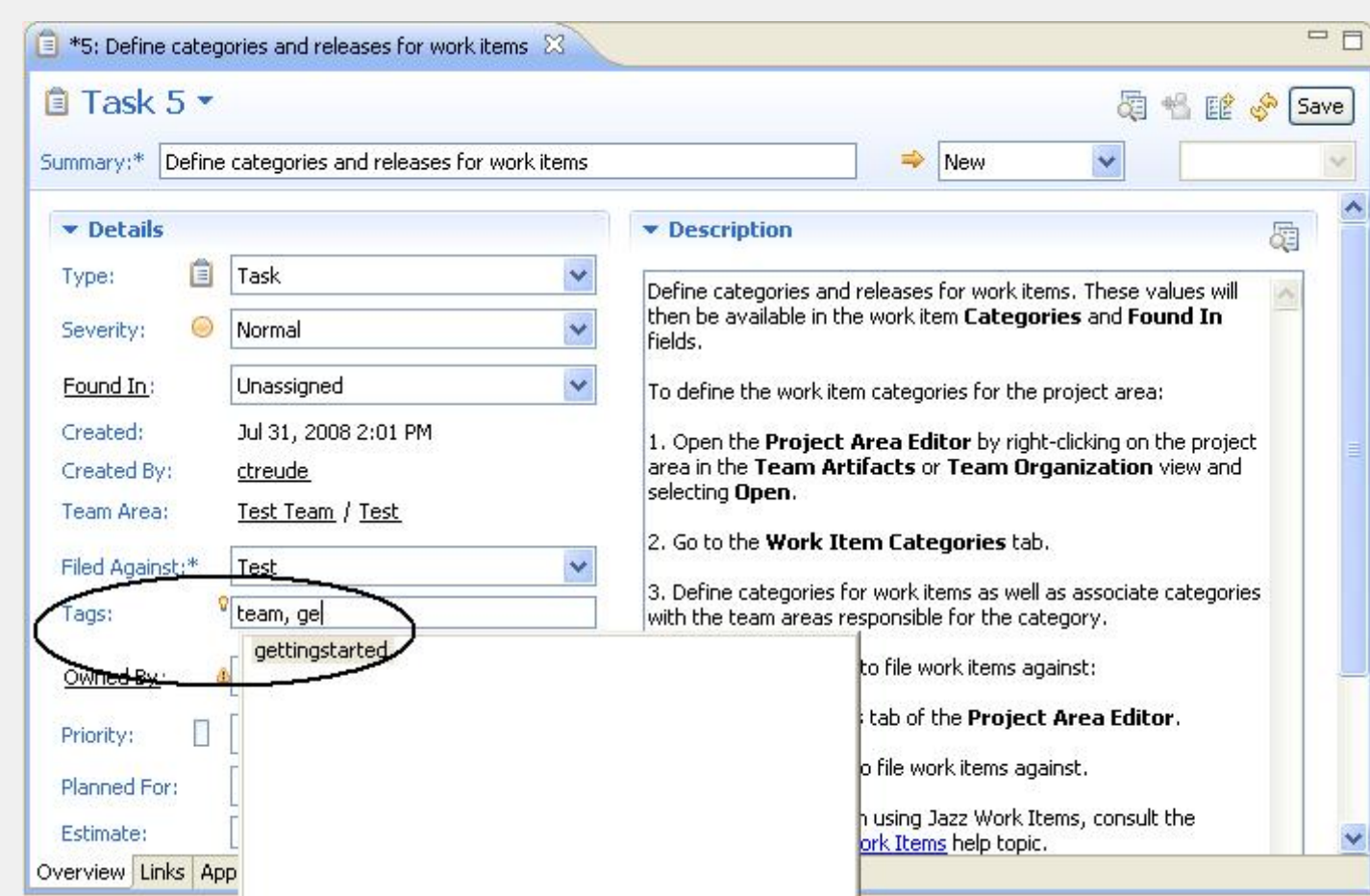
Gap

technical aspects

formal processes

tool support

social aspects

informal processes

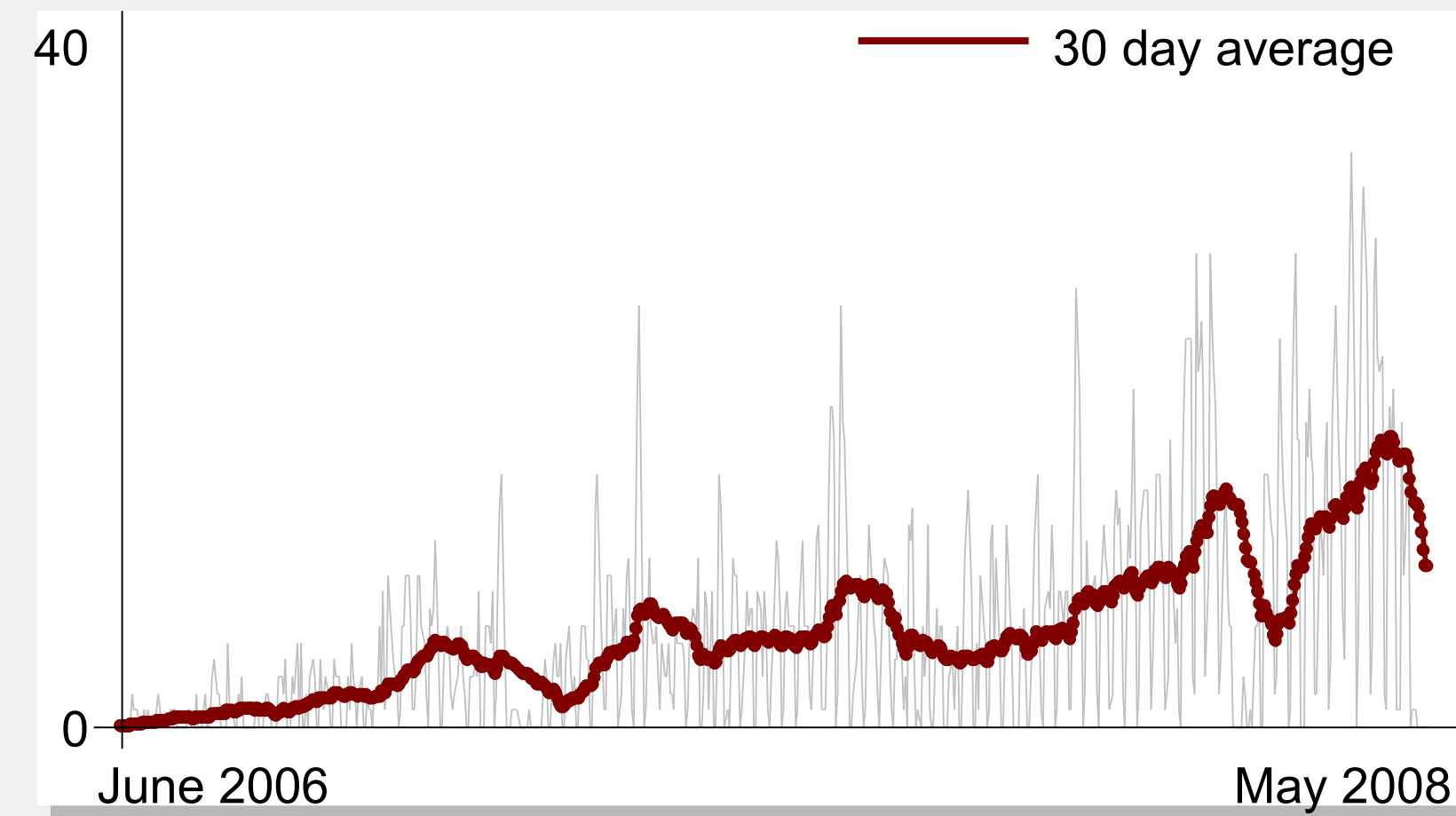communication mechanisms

Jazz work items

Most frequently used tags

beta2candidate editor errorhandling

m6candidate performance

polish

svt testing usability ux

Adoption of tagging

Distinct taggers per day

40

0

June 2006 — 30 day average — May 2008

Reasons for tag use

Categorization
"Tags are useful for identifying cross-cutting concerns."

Organization
"I use tags because I feel like work items should be organized."

Finding
"I use tags so I can have queries and find things."

Tags and collaboration

"I would expect other people in the team to assign tags like *workspaceeditor* or *aspects* if they find issues in that area."

"You just sort of see it happening in the work item's feeds."

"If I've never seen a tag before, I won't even bother to go look it up."

Development-specific tags

Lifecycle related tags

beta2candidate   *rc2candidate*

- related to a milestone
- transient

Component-specific tags

editor   *api*

- refine existing categories
- ad-hoc categorization

Cross-cutting tags

polish   *consumability*

- orthogonal to categories
- describe non-functional requirements

Idiosyncratic tags

buildstatus   *adoption*

- support individual processes
- used only by very few developers

Tag use over time

rc2candidate
m1candidate
m4candidate
beta2candidate
m5candidate
m3candidate
globalization
fvt
beta1candidate
svt
getting_started
consumability
adoption
workspaceeditor
errorhandling
m6candidate
process
exceptionhandling
polish
plan
testing
ux
links
view
editor
ui
api
usability
performance

June 2006   May 2008

Potential tool enhancements

- allow tagging of other software artifacts
- display tag authors along with tags
- allow optional description of keywords
- add lifecycle management for tags
- add reporting mechanism for tags
- suggest tags for incoming work items

Contact information

Christoph Treude, Margaret-Anne Storey
The CHISEL group
Department of Computer Science
University of Victoria
ctreude@uvic.ca, mstorey@uvic.ca

CHiSEL
http://www.thechiselgroup.org/