

# KDE Releases That Just Work(TM)

J.A. van Meeuwen

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#### Off We Go

Introduction

Ye Problem Bugzilla Target(s) Challenge(s

#### What To Do?

Tasks & Teams QA Cleanup Versioning

# Jeroen van Meeuwen Systems Architect, Kolab Systems AG

## Areas of Interest

- Stability of core components of Kolab product
  - ▶ KDE PIM, Kontact client,
  - Cyrus IMAP
- Happy Kolab Systems support staff
- Happy Kolab Systems customers
- Good relationship with happy developers





## **Jeroen van Meeuwen** Systems Architect, Kolab Systems AG

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# Areas of Interest

- ► Release early, release often
- ► Freezes halt (other) progress
- ► Increase ease for (...)





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# **Current Bugzilla Status**

- Many thousands of tickets with version "unspecified".
- Many thousands of tickets with status "UNCONFIRMED".
- Thousands of (open) tickets against legacy products.
- Thousands of tickets with no activity for more than 2 years.
- Generic (mailing list) assignment of tickets.
- Selected canconfirm and editbugs permissions.
- No one throat to choke.
- ► No use of CLOSED status.
- ► No DEFERRED resolution.
- Little to no automated maintenance (of Bugzilla).
- Very fast/frequent entry of new tickets.





# **Examples of Tickets that Linger Around**

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#### Bugzilla

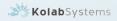
Target(s) Challenge(s

## What To Do?

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# "Not Our Problem"

- ▶ #82679 "uw-imap disconnect w/ second session"
- lack of relevance, can't be fixed, not ours to fix, ...
- "Not Going to Happen (Any Time Soon)"
  - #145645 "do not wrap signature"
  - unless reporter puts up...
- "Closed, deferred"
  - ▶ #87331 "Recurrence \$xth and \$yth DoW,oM"
  - lack of input, lack of feedback





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## Bugzilla

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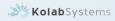
#### Bugzilla

Target(s) Challenge(s

### What To Do?

Tasks & Teams QA Cleanup Versioning Some developers barely look at ticket(s) / queue(s)

- Tickets do not get attention they need/deserve
- Other tools are used to facilitate processes
  - Developers look at Bugzilla even less
  - Reporter feels like nothing happens
  - Less transparency
  - Prospect contributors turned off





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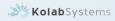
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## Mass-updates prohibited





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Target(s) Challenge(s

## What To Do?

- Some developers barely look at ticket(s) / queue(s)
  - Tickets do not get attention they need/deserve
  - Other tools are used to facilitate processes
    - Developers look at Bugzilla even less
    - Reporter feels like nothing happens
    - Less transparency
    - Prospect contributors turned off
- Mass-updates prohibited
- ▶ No ticket type (—, bug, task, enhancement)
  - Priority / Severity (ab)used
  - Up for improvement
- No or inconsistent use of milestones





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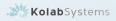
# Products, Components, Versions, Milestones

## Symptom #1: kmail

- "kmail" no longer supported,
- ► still in Bugzilla, alongside preferred "kmail2" successor,
- Open for bug submission still,
- 2595 unresolved tickets,
- New tickets are logged frequently.

## Suggested Treatment

- Temporarily disable Bugzilla change notifications,
- Resolve all unresolved kmail tickets,
- ► Move all "kmail2" bugs over to "kmail" product,
- Remove "kmail2" product.





# High-level Target(s)

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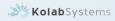
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## What To Do?

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# Bugzilla cleanup

- Formulate and propose standardized use of ticket parameters
- Align documented process and establish responsibilities
- Align use of versions/milestones with source code management
- Mass-updating tickets through sysadmin requests
- One throat to choke





# **Challenges Ahead**

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#### What To Do?

- I'm not the only one to think he's an expert
- I'm not the only expert





# **Challenges Ahead**

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#### What To Do?

- I'm not the only one to think he's an expert
- I'm not the only expert
- ► New to KDE





# **Challenges Ahead**

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#### What To Do?

- I'm not the only one to think he's an expert
- I'm not the only expert
- New to KDE
- Consensus...





# Many Good Ideas

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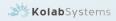
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## What To Do?

- Separate release cycles for (core) components
  - "Frameworks?"
- Concern for (stable) distribution support
- Suggestions for branch standardization (current/next/development)
- More people to test, must be easy to test
- Standardize / Document clearly, release / branch / versioning policies
- Better Cl integration, mandatory commit review, blaming





# Tasks & Teams

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## What To Do?

- Release Engineering
- Quality Assurance
- Triaging
- Development Teams





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## What To Do

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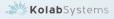
# **Quality Assurance**

# "New" Ticket(s) Workflow

- Group(s) of people that focus on a particular product,
- Attempt to qualify and enhance quality of tickets,
- Attempt to determine relevance of "old " tickets.

# Release Workflow

- Group of people that test alpha/beta/rc,
- Mark their tickets as high quality,
- Developers search for these tickets,
- Hopefully they get resolved (in time for GA).
- No QA contact Bugzilla field used.
- Issues resolved do not become test-cases.





# **Spring Fever**

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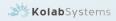
Tasks & Teams QA Cleanup

Versioning

# Grand Bugzilla Clean-up

- Close new ticket entry against unsupported products,
- Close off all tickets with the last change earlier than \$x years ago,
- Close off all tickets against unsupported products / versions<sup>a</sup>,
- Make this a regular process but with earlier than \$y months.

<sup>a</sup>This requires a walk-through first





# Define Bugzilla field values

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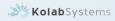
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Versioning

# Example: Version, Milestone

Standardize version/milestone references, for example;

- '4.9-next' for 4.9 branch HEAD,
- '4.9-stable' for latest (stable) release in 4.9 series,
- ▶ '4.9.\$z' for specific (stable) 4.9 series release,
- '5.0-next' for master branch HEAD,
- not "Git (master)" (several), "KDE 4", "MS Windows" (kaddressbook), "CVS", "SVN Trunk", "enterprise" (Kontact)
- ► Agree on & Standardize such guidelines





# Define Bugzilla field values (2)



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Cleanup

Versioning

# Example: Priority, Severity, Importance

- Priority is "order in which to resolve",
- Severity is "impact" (critical, trivial), or "cannot release with/without" (blocker),
- ► Importance is combined Priority and Severity (no score)
- Ticket type (bug, task, enhancement) has not been added / is not used.





# **Postpone and Prioritize**

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## What To Do?

Tasks & Teams QA Cleanup

## (Ab)use a "future" milestone, says...

- Inclusion not yet planned for any other existing target milestone,
- ► No due date.

# The "4.9-next" milestone, says...

- ► To be included in the next teeny 4.9 series release.
- ► Act on "4.9-next" when "4.9.\$z" release is planned.
- Tickets with "4.9.\$z" milestone now form "To Do Before Release" queue, nice for developers.





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# **Versioning Policies**

# Example Versioning Bump Policy

- \$micro bumps for bugfixes only (patchlevel),
- \$teeny bumps for small feature enhancements
- \$minor bumps for larger feature enhancements (upgrade possible),
  - may include new/changed run-time dependencies,
  - may include new/changed build dependencies,
- \$major bumps for great feature enhancements
  - rewrite, refactor, significant changes to package structure, dependency changes
- \$x.\$y(.\$z) could correspond with SCM branches,
- \$x.\$y(.\$z) with Bugzilla versions & milestones,





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#### What To Do

- Release early, release often
- dev, alpha, beta, rc

