

The QA process for OpenOffice.org
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Co-lead of the QA project at OOo (other leads: Scott Carr,
Gordon Shum)

- Any registered user can submit an issue, the status of an issue is “unconfirmed” initially
- Submitters with more privileges (developers, QA members) submit issues with the status “new”
- Each submitted issue is automatically assigned to the defined QA owner of the respective subcomponent, if not assigned explicitly to somebody else
- OOo QA project members try to confirm “unconfirmed” issues, look for duplicates, ask for missing information etc. Confirmation (which requires privileges, too) leads to the status “new”

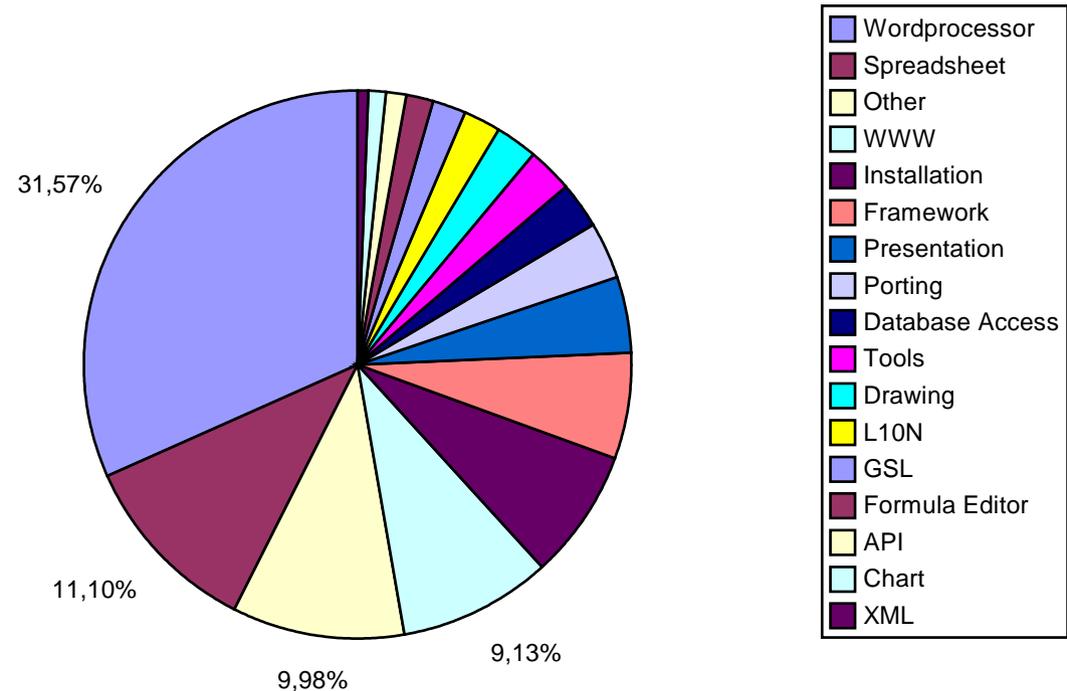
- The issue owner – mainly Sun QA members or developers – then either further dispatches the issue or works on it.
- After an issue is fixed, a QA member verifies the fix and closes it, presumed the issue is really fixed :-)

IssueZilla (derived from BugZilla) is the bug tracking system used to track issues with OpenOffice.org

- More than 12500 issues have been reported
 - More than 4000 issues have been fixed
 - More than 3700 issues have been resolved otherwise:
 - 1450 issues have been marked “duplicates”
 - 1250 issues have been marked “worksforme”
 - 1050 issues have been marked “invalid”
 - Altogether more than 9000 issues have been worked on so far (not in the status “unconfirmed” or “new”)
 - Of the 6000 issues reported after the creation of the QA project in summer 2002, more than 1500 contain the oooqa keyword, which means, have been handled by QA volunteers
 - The downside: more than 3500 issues need handling
 - More than 2150 issues are in the status “unconfirmed”
 - More than 1350 issues are in the status “new”

Component	Count
Wordprocessor	3955
Spreadsheet	1391
Other	1250
WWW	1144
Installation	977
Framework	766
Presentation	550
Porting	426
Database Access	345
Tools	343
Drawing	315
L10N	280
GSL	247
Formula Editor	198
API	149
Chart	123
XML	70

Issue Distribution by component



Automated source code QA

- Extensible test harness written in Java
- Capable of running C++, Basic, Java testcases (and open for others)
- Capable of controlling the office, startup/shutdown
- Test cases available in C++, Java and Basic that cover the complete OpenOffice.org API
- Capable of running JUnit tests soon
- Installable package that contains all cvs files and a setup to install them locally
- Includes tools for automated status generation

TestTool for automated GUI testing

- Replaced 3rd party tools in 1997
- Written in C++
- Connects via TCP/IP
- Works on control's unique Ids
- Platform-independent
- OpenOffice.org language-independent
- Available now with update/resource test scripts, that invoke every OOo dialog -> great for checking localized strings -> great for testing new ports

- Just recently we've re-defined the five existing issue priorities, so StarOffice and OpenOffice.org priorities are aligned now
- The release criteria define, that a product shouldn't be released with unresolved issues of P1 to P3. P4s are “desired to be fixed”, P5s are “nice-to-have”
- As there will always be exceptions to this definition, setting “target milestones” - a field in IssueZilla – is used to control releases better, so at the end of the day queries on the respective target milestone are used to track the status of a coming release

- Automated smoke tests will be integrated into build/packaging process very soon
- More QA volunteers are required to help confirming issues in the status “unconfirmed”
- Scarab, the successor of IssueZilla, will hopefully allow a better workflow
- We – Sun – will soon track all issues that refer to components common to OpenOffice.org and StarOffice in IssueZilla, thus increasing transparency
- Bi-weekly snapshots of the current code line will be available (the first are already out)

- All test scripts will be released
- All test plans will be released
- QA of localized builds will be organized
- The TestTool will be used to test localized builds and builds on “new” platforms

Thanks to

- the team getting out the TestTool package after re-writing and reviewing the documentation
- the team getting out the API testing framework recently
- the other leads of the QA project, Scott and Gordon, for all the work they've put in there (Gordon worked on more than 1000 issues!)
- the other QA project members that help improving OOo quality by either submitting issues themselves or working on issues submitted by others
- Robert Kinsella for running the smoke tests
- the folks that now start getting the QA for the localized builds organized

Links & questions

- OpenOffice.org
- Subproject

<http://www.openoffice.org>

<http://qa.openoffice.org>

Questions?