CDT (C/C++ Development Tooling) 3.1 in the Callisto Simultaneous Release

May 26, 2006

Features

- The major feature of this release is a re-architecture of the CDT's indexing framework

    - New Index Storage

    - New Fast Indexer

    - Adaptation of all CDT index-based features to use new framework

Non-Code Aspects

- Very little non-code activity has been done in this release
  - User documentation has not been updated for this release
  - Not tutorials, examples have been created for this release
- Localization has not been tested in this release

APIs

- All APIs in the CDT are provisional in this release
    - Anticipate API freeze in CDT 4.0 for June 2007
- Index and Search APIs have been replaced
    - To reflect new framework
- CDT Debugger Interface (CDI) has changed very little
- Managed Build APIs have been extended

- It is recommended that all clients of CDT APIs upgrade to CDT 3.1, i.e. do not assume backwards compatability.

Tool Usability

- Usability has been enhanced in minor areas
  - E.g. being able to change build config from toolbar

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Architectural Issues

- The new indexer architecture allows for much faster processing of source parsing information
  - With more DOM information stored in the index, clients no longer need to fully parse to get this information
- Build and Debug architectures remain strong
  - Numerous vendors are providing integrations using these components

End of Life

- The Index and Search APIs from CDT 3.0 have been removed
    - Resourcing did not allow for a backwards compatability layer to be built to the new Index APIs
- The ctags indexer has been removed
    - Resourcing did not allow for the ctags indexer to be integrated into the new framework
    - Ctags does not provide sufficient information to populate index as is.

Bugzilla

- Around 950 bugs open at the time of the release

- 232 bugs have been resolved that were targeted to the 3.1 release

Standards

- Parsing standards
  - ISO/IEC9899:1999 Programming Languages – C
  - ISO/IEC14882:1998 Programming Languages – C++

UI Usability

- Little has been done to improve the UI usability of the CDT in this release.

Schedule

- CDT followed the schedule for Callisto and successfully delivered on time for each milestone.

Process

- CDT development continues to be open, transparent, permeable, and inclusive.
- Follows the Eclipse Development Process

Communities

- CDT had two gatherings of contributors
    - Ottawa Oct 2005, Santa Clara Apr 2006 (day after EclipseCon)
- CDT continues to hold monthly conference calls
    - First Thursday of each month 1 p.m. Ottawa time
- Developer discussions continue to happen both on mailing lists, cdt-dev, and through bugzilla
- The CDT user community gathers on the cdt newsgroup
- CDT specific blogs
    - http://cdtdoug.blogspot.com
- Some co-ordination with other Eclipse projects
    - DSDP, TPTP, Eclipse Platform, and all Callisto projects for release

IP Issues

- About files and license files are complete and correct

- All significant and third-party contributions have been reviewed by Eclipse Legal
  - There were no significant 3rd party contributions that required review

- Project log complete and is pending review by Eclipse Legal
  - http://download.eclipse.org/tools/cdt/releases/callisto/cdt_3.1_project_log.csv

Project Plan

- CDT will follow Callisto maintenance release plan
  - CDT 3.1.1 – Sept 2006
  - CDT 3.1.2 – Feb 2007
- CDT will follow Europa release plan for next major release
  - CDT 4.0 – June 2007

Release Review Version

- *version 034 - October 6, 2006*