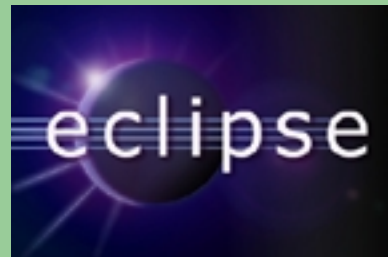


Eclipse Data Tools Platform (DTP) 0.7 Release Review

Eclipse DTP PMC
March 8, 2006



Introduction

- DTP 0.7 is scheduled for March 17
 - Supports Eclipse 3.1.x
 - Supports Eclipse 3.2M5
- DTP 0.7 is a step toward a DTP Callisto release in June 2006
 - Supports Eclipse 3.2
 - Potential maintenance releases of 0.7 depending on community feedback

DTP 0.7 Milestones

- M1: 11/11
- M2: 12/23
- M3: 1/20
- M5: 3/1
 - First release candidate (RC0)
 - Skipped “M4” to synchronize with Callisto numbering scheme

DTP 0.7 Requirements Process

- Community feedback on DTP proposal
- EclipseCon 2005 Meetings
- Code reviewed from
 - WTP, BIRT, Sybase, objectNation
- Code adopted in DTP 0.7 from
 - WTP, BIRT, Sybase
- Newsgroup & mailing list comments

DTP 0.7 Design Efforts

- Captured in documents
 - Published on each projects' site
 - Highlighted in top-level plans
- Captured in meeting minutes
 - Published to mailing lists
 - Open decision process
- Discussions on dtp-dev with community at large
- Key points captured in Bugzilla

DTP 0.7 Themes

- Consolidate shared experience and code of initial contributors
- Concentrate on frameworks first, tools second
- Provide a solid foundation for future components building on DTP
- Become accustomed to working within the Eclipse community

DTP Features: Model Base

- Based on Eclipse Modeling Framework (EMF)
- Provides domain models for
 - SQL
 - Database definition
 - SQL Query
- Leverages domain-driven design and coding in the spirit of EMF

DTP Features: Connectivity

- Frameworks for making and working with connections:
 - Driver Management Framework
 - Connection Management Framework
 - Open Data Access (ODA) Framework
- Exemplary Tools:
 - Data Source Explorer (DSE)
 - ODA Design UI

DTP Features: SQL Dev Tools

- Frameworks for SQL development:
 - SQL Editor Framework
 - Routine Editor & Debugger Framework
 - SQL Execution Plan Framework
 - SQL Query Parser Framework
- Exemplary Tools:
 - SQL Scrapbook editor
 - Results and History Views

Non-Code Aspects: Documentation and Examples

- Database Examples
 - Generic JDBC Support
 - Apache Derby 10/10.1 Support
- ODA Examples:
 - Flat File Connection Profile
 - Flat File UI Examples
- Documentation on every project site
- Documentation plug-in included in SDK

Non-Code Aspects: Internationalization & Localization

- Support of ICU libraries
 - Native in Eclipse 3.2 DTP stream
 - Also included in Eclipse 3.1.x DTP stream
- Enablement Process (w/ IBM)
 - Work in progress: Expected for DTP Callisto
 - L10N support and testing in wide number of languages (~23)

DTP 0.7 API Statement

- This is the first DTP release
 - No official, Eclipse-quality APIs
 - With exception of ODA runtime interfaces, provisional API since M1
- Provisional API statement for DTP 0.7
- Documented in SDK help plug-in
 - Extension points
 - Code APIs
- Example code included in SDK

Architectural Issues

- Integration with BIRT in DTP 0.7
- Integration planned with WTP 2.0
- Planned integration with STP
- Issues
 - Need to work with these clients to enable easy integration
 - Given more general community adoption, need to adjust DTP design accordingly
- Parts of DTP work well in RCP

Defect Policies

- Tested by DTP committers and community
- All automated tests available in CVS
- Release Criteria
 - No blocking, critical or major defects
 - “Stability vote” by DTP committers

Bugzilla Statistics

| | At M5 (RC0) | Up to M5 | Totals |
|---------------|-------------|-----------|------------|
| Blocking | 2 | 2 | 4 |
| Critical | 2 | 1 | 3 |
| Major | 2 | 2 | 4 |
| Normal | 32 | 43 | 75 |
| Minor | 4 | 3 | 7 |
| Trivial | 2 | 0 | 2 |
| Enhancement | 16 | 7 | 23 |
| Totals | 60 | 58 | 118 |

Code Statistics

- Based on Eclipse Metrics project:
<http://metrics.sourceforge.net/>
- Model Base:
 - 5 plug-ins
 - 125 KLOC
- Connectivity:
 - 22 plug-ins
 - 55 KLOC
- SQL Dev Tools:
 - 15 plug-ins
 - 86 KLOC
- Totals
 - 42 plug-ins
 - 266 KLOC

Standards

- SQL Model is based directly on the SQL 99/03 SQL standard
- Sample database connectivity is based on JDBC standard

UI Usability

- SQL Dev Tooling allows users to create, edit, and test SQL statements
- Connectivity components allow for using heterogeneous data sources during development
 - Now: Generic JDBC, Apache Derby example
 - With community support, more databases
 - ODA has flat file, other drivers from community

Schedule

- Iterative development cycle, enabling agile reactions to community feedback
 - Milestones at major points
 - Iterations during milestones
 - Nightly builds at critical junctures
- Adopting best practices from other Eclipse top-level projects

Process: Achievements

- Extensive use of mailing lists and newsgroups for discussions and decisions
- Code available in CVS early
- Full disclosure of schedules and delays
- Announcements about major feature deliveries
- Bugzilla used to mark defect and feature work
- Weekly PMC and project lead/PMC meetings

Process: Room to Grow

- Earlier and better design documentation
- Develop use cases, especially for API
- More automated tests
- Follow and update Bugzilla faster
- Mitigating factors
 - First time through Eclipse release for DTP
 - Large initial code contributions

Community: Participation

- Mailing lists
 - General development (dtp-dev)
 - PMC (dtp-pmc)
 - One for each project
- Newsgroup
- Dtp-dev is busy, project mailing lists less so
- Newsgroup mostly as gateway to DTP
- Interest in DTP from BIRT, WTP, STP
- DTP is a member of Callisto

Community: Visibility

- Presentation at EclipseWorld 2005
- Two articles in ACM “Queue” magazine
- Article on EclipseZone
- Article in Eclipse Developers Journal
- EclipseCon 2006
 - One tutorial session
 - Two long talks
 - BOF, informal meetings
- bostonEdge Eclipse Developers Group
- “Eclipse in Motion” Code Camps: Raleigh and Atlanta

Community: Newsgroup Feedback

- “We're eager to use the new datasource explorer...”
(<http://www.eclipse.org/newsportal/article.php?id=175&group=eclipse.dtp#175>)
- “I have to say that I like what I've seen so far...”
(<http://www.eclipse.org/newsportal/article.php?id=141&group=eclipse.dtp#141>)
- “The BIRT & DTP projects look very promising ...”
(<http://www.eclipse.org/newsportal/article.php?id=213&group=eclipse.dtp#213>)

Intellectual Property

- Contributions
 - All DTP 0.7 comes only from DTP committers
 - All DTP 0.7 code provided under the Eclipse Public License (EPL)
- Third Party Libraries
 - No third party libraries included (EPL or otherwise)
 - SQL Query Parser depends on *lpg.jar*, available for separate download from IBM
- Due Diligence & Record Keeping
 - All DTP committers have signed Committer Agreement forms and been approved by EMO
 - IP Log maintained by PMC and available on DTP web site
 - EMO source scan and due diligence in progress

Project Plan

- DTP 0.7 planned for March, 2006
- DTP Callisto release planned for June, 2006
 - In synchronization with Eclipse 3.2 release
 - Aiming for “1.0” designation
- Tentative release planned for late 6Q4
- Talking about two major releases per year going forward, but no settled plans yet

Thank You!

- For the interest and support so far
- Please visit us on our mailing lists and newsgroups
- Come visit us at EclipseCon!
- New proposals for DTP always welcome...

www.eclipse.org/datatools