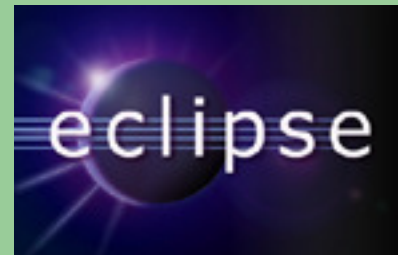


# Eclipse Data Tools Platform (DTP) 1.6 Release Review

Eclipse DTP PMC  
May 27, 2008





# Introduction

- DTP 1.6 is scheduled for week of 6/25
- Build Platform
  - Platform: Eclipse 3.3.2
  - Dependencies: EMF 2.2.2, GEF 3.3
  - JVM: Sun J2SE 1.4.2
- Primary Target Platform
  - Platform: Eclipse 3.4
  - Dependencies: EMF 2.4, GEF 3.4
  - JVM: Sun J2SE 1.5



# DTP: Previous Releases

- DTP 0.7: April 7, 2006
- DTP 0.9 (Callisto): June 30, 2006
- DTP 0.9.1 (Callisto): September 29, 2006
- DTP 1.0: December 22, 2006
- DTP 1.5 (Europa): June 25, 2007
- DTP 1.5.1 (September 2007)
- DTP 1.5.2 (February 2008)

# DTP Projects

- Model Base: Core EMF models for DTP
- Connectivity: Frameworks and tools for connecting to data sources
- SQL Development Tools: Frameworks and tools for working with SQL
- Enablement: Data source specializations for DTP frameworks



# DTP 1.6 Milestones

- M5: February 13
- M6: March 26
- M7/RC0: May 5
- RC1: May 19
- RC2: May 26
- RC3: June 2
- RC4: June 9
- 1.6 Release: Week of June 25



# DTP 1.6 Requirements Process

- Community feedback on DTP 1.5, 1.5.1 and 1.5.2
- Presentations & Discussions:
  - EclipseCon 2008
  - EclipseWorld 2007
  - Eclipse Summit Europe 2007
- Bugzilla bugs and enhancements requests
- Newsgroup & mailing list comments

# DTP 1.6 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 1.6 Themes

- Provide incremental feature improvements for all projects
- Additional enablement support
- Evolve the core frameworks past DTP 1.5
- Provide usability improvements for UI components
- Provide new functionality in the form of the SQL Query Builder UI component





# DTP 1.6 Features: Some Examples

- Enablement
  - Sybase ASE model and catalog loader
- Core Connectivity
  - ODA integration with DB profiles
- SQL Query Builder
  - Contributed by IBM
  - Worked on by IBM & Sybase
  - Early adoption by BIRT
- Usability
  - Increased usability for adopters & users of DTP Connectivity UI frameworks
- Further stabilize the foundation of DTP by resolving as many bugs and *Discouraged Access* warnings as possible.
- Enhance user tools to make DTP a compelling choice for developing data centric applications in Eclipse.
- Make DTP easier to understand and leverage, from both the extender and user perspectives.
- **Meet milestone dates in tight synchronization with Ganymede plans.**



# Non-Code Aspects: Documentation & Examples

- Database Examples
  - Driver templates for 11 databases
  - Generic JDBC Support
  - Apache Derby 10.x Support
- ODA Examples:
  - Flat File Connection Profile
  - Flat File UI Examples
- Documentation: ISV and User Refresh



## Non-Code Aspects: Localization, Internationalization & Accessibility

- Using ICU libraries
- Strings externalized and ready to be localized
- NL packs for DTP 0.9 can be used as a base for DTP 1.6 localization efforts
  - New Actuate committer working on localization into 6 languages (check with Linda for specifics)
  - Have tested in the areas of globalization and bidirectional support
- ODA and dependencies localized strings are in DTP CVS
- Working through Accessibility checklists

# DTP 1.6 API Statement

- Selected ODA and Connectivity framework API promoted to platform status:
  - Proposed to community on public mailing list; no objections
  - See <http://dev.eclipse.org/mhonarc/lists/dtp-dev/msg01210.html> for details.
- All other API are *provisional* for DTP 1.6
- We follow the platform's policy and Jim des Rivières "How to Use the Eclipse API" article\*
  - Usage of "internal" consistent with platform
  - Presence of clear API declaration
  - Support and evolution commitment in line Jim's article and platform practices

\* <http://www.eclipse.org/articles/Article-API%20use/eclipse-api-usage-rules.html>

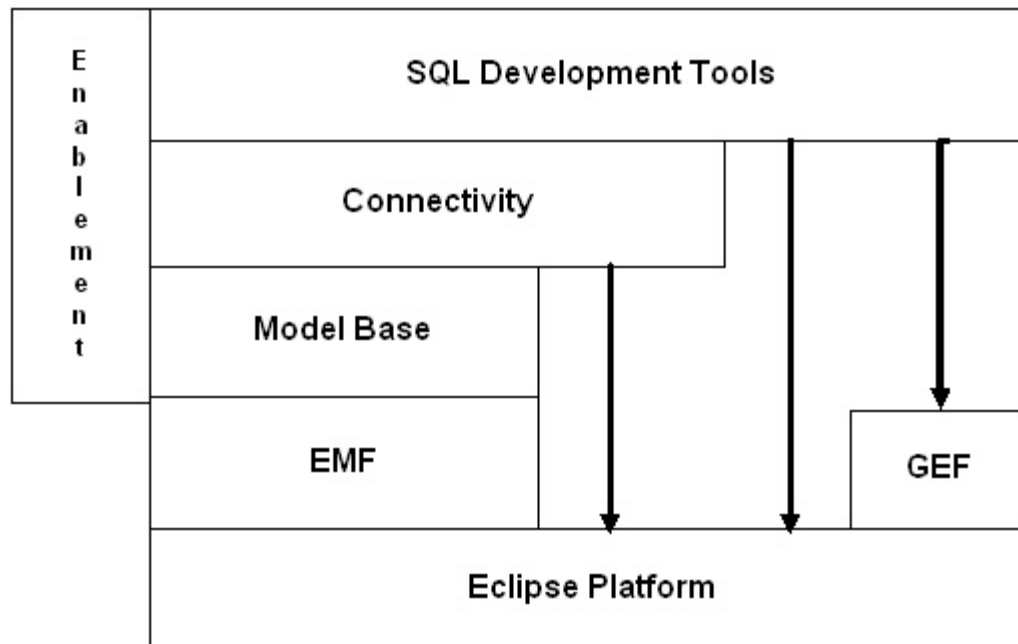


## DTP 1.6 API: Details

- 17 extension points declared
- 86 Java packages
- Usage details in ISV plug-in
- Requirements, specifications available on web site, wiki, and Bugzilla
- Unit tests available in CVS
- Exemplary clients bundled with DTP
- Some of the new extension points are lacking sufficient documentation (will be resolved by RC3 or in 1.6.1)

# DTP Architecture

High level architecture view, at project granularity:





# Architectural Issues

- Further integration of DTP models and components, including parser
- Streamlining of some DTP Connectivity models to simplify implementation and usage
- Increase number, depth and quality of exemplary and extensible tools going forward
- Pull code up into frameworks from Enablement as necessary



# Defect Policies

- Tested by DTP committers and community
- All automated tests available in CVS
- Release Criteria
  - No blocking, critical or major defects assigned against release candidate
  - Anyone in the community can petition the PMC to delay a milestone or release for a specific bug
  - Designed a Rampdown policy to be adhered to by all DTP developers





## Bugs Resolved as of 5/23

	M5	M7	RC1	RC2	Total
Blocking	0	1	0	0	1
Critical	2	7	0	0	9
Major	6	15	5	0	36
Normal	31	58	24	10	123
Minor	1	1	6	2	10
Trivial	0	0	0	0	0
Enhancement	12	14	1	0	27
<b>Total</b>	<b>52</b>	<b>96</b>	<b>36</b>	<b>12</b>	<b>196</b>



# Bug Trends

Number of bugs open on release date, excluding enhancements:

	<b>Open</b>	<b>Delta</b>
<b>DTP 0.7</b>	13	---
<b>DTP 0.9</b>	19	6
<b>DTP 0.9.1</b>	29	10
<b>DTP 1.0</b>	40	11
<b>DTP 1.5 (est.)</b>	90	50
<b>DTP 1.6 (est.)</b>	190	100



# Code Statistics

	<b>Plug-ins</b>	<b>KLOC</b>
<b>Model Base</b>	6	90
<b>Connectivity</b>	22	97
<b>SQL Dev Tools</b>	21	198
<b>Enablement</b>	49	94
<b>Total</b>	98	479

# Standards

- Based on the SQL99/03 standard
  - SQL model
  - SQL query model
  - SQL query parser
- Sample database connectivity is based on JDBC standard



## UI Usability

- SQL editor allows users to create, edit, and test SQL statements
- SQL routine editor allows for execution of stored procedures
- SQL query builder allows for graphical construction of SQL queries
- Connectivity components allow for using heterogeneous data sources



# Schedule

- Iterative development cycle, enabling agile reactions to community feedback
  - Milestones at regular intervals
  - Nightly builds between milestones
  - Release candidates for endgame
- Project plan and endgame plan posted on DTP web site and updated as necessary



## Schedule: Planned v. Actual, as of RC2 (5/30)

	Planned	Actual	Delta (days)
<b>M5</b>	2/16	2/16	0
<b>M6</b>	3/30	3/30	0
<b>M7/RC0</b>	5/11	5/11	0
<b>RC1</b>	5/19	5/19	0
<b>RC2</b>	5/26	5/26	0



# 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
- In general, strive for continuous improvement



# 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
- Committers from
  - Actuate
  - IBM
  - NEC Soft
  - Sybase



# Community: Visibility

- Conference presentations
  - EclipseWorld 2007
  - EclipseCon 2007, 2008
  - Eclipse Summit Europe 2007
  - OS Summit Asia 2007
- Articles
  - EclipseZone
  - Eclipse Developers Journal
  - Eclipse Review
  - Blog Articles
- Other Events
  - Demos (PodTech, RedMonk)
  - Eclipse Live Webinars



# Community: Adoption

- “Community” page on DTP web site\*
- Commercial Adoption
  - Sybase
  - Actuate
  - Nexaweb
  - Oracle
  - Ingres
- Open Source
  - BIRT
  - Jalcedo
  - JFire
  - NightLabs
  - WTP
- Standards
  - OMG for *Information Management Metamodel* (IMM)\*\*
- Based on community feedback, estimating about 8 to 10 more commercial products in development using DTP

\* <http://www.eclipse.org/datatools/community.html>

\*\* <http://www.omg.org/cgi-bin/doc?ab/05-12-02>



# Community: Download Details\*

	<b>SDK</b>	<b>Runtime</b>	<b>Update Site</b>
<b>DTP 0.7</b>	3,102	0	(no update site)
<b>DTP 0.9</b>	8,247	50	31
<b>DTP 0.9.1</b>	1,706	689	7,520
<b>DTP 1.0</b>	12,255	4,203	11,870
<b>DTP 1.5</b>	67,641	16,250	tbd
<b>Subtotal</b>	<b>92,951</b>	<b>21,192</b>	<b>19,421</b>

\* Through May 23, 2008



# Community: Statistics\*

- 92,951 downloads of DTP 0.7 – 1.5
- Newsgroup
  - Number of posts: 1128
  - Number of participants (not DTP committers): 101
  - Repeat Rate (not DTP committers): 60%
- Bugzilla
  - Total (bugs & enhancements): 1201
  - Accepted bugs: 829
  - Enhancement requests: 184
  - Number of submitters (not DTP committers): 128

\* Through May 23, 2008



# Intellectual Property

- Contributions
  - All DTP 1.6 comes only from approved channels
  - All DTP 1.6 code provided under the Eclipse Public License (EPL)
- Third Party Libraries
  - All third party libraries sourced from Orbit
  - SQL Query Parser depends on *lpg.jar*, available for separate download from SourceForge
- 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
    - <http://www.eclipse.org/datatools/dtp-log.csv>
  - Eclipse legal review complete



# Project Plan

- DTP 1.6 maintenance releases with Ganymede
- Two maintenance releases planned for 2008/2009
- Next major release will coincide with the next major platform release (e4 or otherwise)
- Additional releases will be considered based on community requests and readiness





# Thank You!

- For the interest and support so far
- Please visit us on our mailing lists and newsgroups
- New proposals for DTP always welcome...  
[www.eclipse.org/datatools](http://www.eclipse.org/datatools)