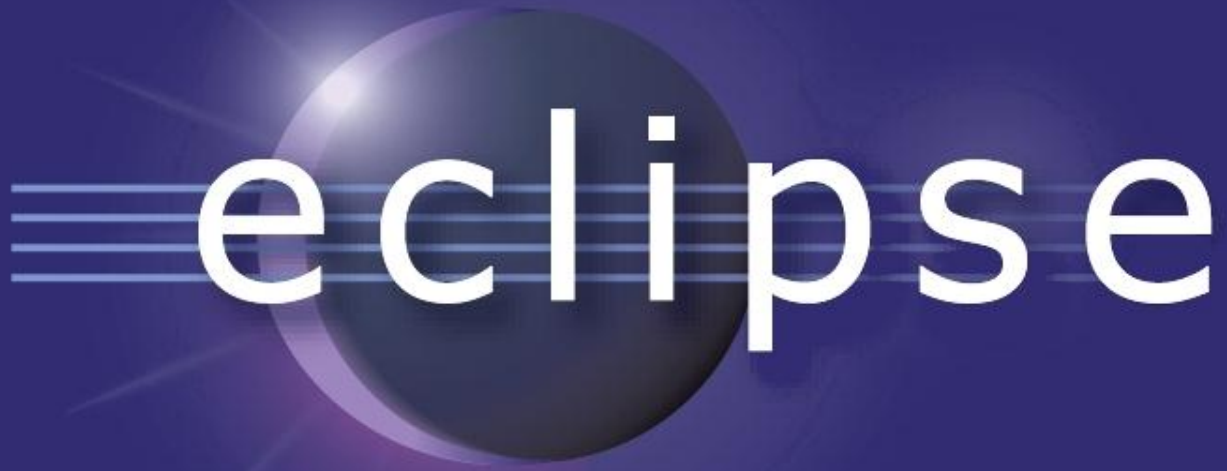
Gemini DBAccess
1.1.0 Release Review

February 2013



Gemini DBAccess is a member of the Eclipse Gemini and Eclipse RT projects

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Review Specifics

Review Date:

- Feb 6-13, 2013

Communication Channel

- Gemini Dev list (gemini-dev@eclipse.org)

Project Home:

- http://www.eclipse.org/gemini/dbaccess

Mission

DBAccess provides database connectivity to OSGi applications by encapsulating JDBC driver access in an OSGi compliant way.

As a subproject of *Eclipse Gemini*, *DBAccess* is a building block for modular implementations of Java EE technology.

It seamlessly integrates with other modules of the *Gemini* umbrella project, especially with *Gemini JPA*, but it can also be consumed as individual module by any OSGi application.

Introduction

- Gemini DBAccess is an implementation of an OSGi specification that standardizes the way in which an application can access JDBC drivers within an OSGi framework
- Major use case are:
  - OSGi applications that want to access a database via JDBC.
  - Frameworks as Gemini JPA that use DBAccess as their underlying database connectivity service.

Features

DBAccess enables to write applications such that they do not require any reference to a specific JDBC driver implementation: there is no need to import vendor specific driver classes.

For each vendor JDBC driver, an associated JDBC DBAccess bundle is created that exposes the vendor DataSource as an OSGi Service.

Features

So far, following JDBC drivers are supported:

- Apache Derby (already supported with DBAccess 1.0)
- MySQL
- H2
- HSQLDB

For more details see:
http://wiki.eclipse.org/Gemini/DBAccess

Release Contents

The current release has the following contents:

- DBAccess OSGi bundles for Derby, MySQL, H2, and HSQLDB
- Unit and integration tests
- User documentation
- Sample application (source)

Development

Gemini DBAccess is an active project, open for participation. The committer guidelines outline the preferred way of co-operation. The project has gained new contributors:

- Committers: 3 (SAP AG, Oracle)
- Non-committer code contributors: 4

Non-Code Aspects

User documentation:

- Basic usage instructions on the Gemini DBAccess wiki
- Sample application in the delivered archive
- OSGi 4.2 JDBC Service Specification Version 1.0

Internationalization

- I18n not relevant as there are no end user oriented messages

APIs

Supported Standard APIs

- OSGi Service Platform Enterprise Specification, Release 4, Version 4.2, section 125 (*JDBC Service Specification Version 1.0*)
- Integrates with: OSGi 4.2 Core and Compendium Service
- Can be used with: JDBC 3 and JDBC 4

Native API

- None

Architectural Issues

Each provided DBAccess module is based on the presence of an associated JDBC driver. For Derby, that driver is packaged together with the DBAccess module:

- DBAccess for Apache Derby: Delivered with Derby JDBC driver 10.8.2.2.

Tool Usability

DBAccess is a set of bundles that is developed using the Eclipse PDE. Users who consume the bundles can also do that within the Eclipse PDE; but they are free to use any tool of their choice. DBAccess does not provide specific tools or plugins that assist development or usage.

Bugzilla

- The project has following bugzilla status:

		Status			
		NEW	RESOLVED	CLOSED	Total
Severity	normal	.	7	1	8
	trivial	.	1	.	1
	enhancement	3	8	.	11
	Total	3	16	1	20

- CQ Approved - 6

Standards

- Gemini DBAccess requires Java 5 or later
- Compliant with OSGi Service Platform Enterprise Specification, Release 4, Version 4.2
- Integrates with Java Database Connectivity, JDBC 3 and JDBC 4

Schedule

- February 2013 target for 1.1.0
- Milestones and Release candidates have been produced and downloads made available

Communities

- Bugzilla in active use by users and contributors
- Gemini forum
- Gemini developer mailing list: gemini-dev

IP Log

- Eclipse IP policies and procedures have been followed
- The IP Log has been approved