# **Akubra Project**

The Akubra Project is a new effort to provide a pluggable file storage interface that can be adapted to almost any storage subsystem. Akubra supports both ordinary and transactional storage systems, but makes simplifying assumptions in order to achieve a high level of interoperability between storage systems:

#### In Akubra:

- a Blob is a finite-length bitstream with an id (a URI)
- a Blob Store is primarily concerned with providing read/write access to blobs.

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### News

- March 3rd, 2012 Akubra 0.4.0 released. This release updates all runtime and test dependencies to their most recent versions. Implementations
  designed for 0.3.x should continue to work with 0.4.0 using the prior versions of these libraries as well. The following tracker items were
  addressed by this release:
  - AKUBRA-5 Fix Javadoc linkage in built artifacts
  - AKUBRA-8 Update libs for 0.4.0
- March 1st, 2012 Akubra 0.3.1 released. This release fixes the following bugs with the akubra-fs implementation:
  - AKUBRA-1 Failure to move files across symlinks, filesystems on some platforms.
  - AKUBRA-3 FSBlob makeParentDirs thread safety issue.
  - AKUBRA-7 FSBlobIdIterator escapes file paths
- March 13th, 2010 Akubra 0.3 released. This release has no core API changes, but several important improvements:
  - O The core Akubra jars are now available in Maven Central
  - All jars are now compiled for Java 6 (Java 5 has reached its End of Service Life)
  - All jars now include OSGi metadata
  - Logging is now done via SLF4J (was commons-logging)
  - The JTA dependency is now to version 1.1 (was previously 1.0.1B)
- November 27th, 2009 Akubra 0.2 released. This release:
  - Uses the latest version of Derby for the akubra-txn implementation
  - Repackages the Akubra classes under org.akubraproject
- April 30th, 2009 Akubra 0.1 released.

### Latest Downloads & Javadocs

- Core API
  - o akubra-core-0.4.0.jar The Core Akubra API [javadocs]
- Base Implementations
  - o akubra-fs-0.4.0.jar Simple filesystem implementation (non-transactional) [javadocs]
  - o akubra-mem-0.4.0.jar In-memory implementation (non-transactional) [javadocs]
  - o akubra-www-0.4.0.jar Web implementation (non-transactional, read-only) [javadocs]
- Lavering Implementations
  - akubra-map-0.4.0.jar- Wraps an existing BlobStore to provide a blob id mapping layer [javadocs]
  - o akubra-mux-0.4.0.jar Provides a unified view over any number of backing stores [javadocs]
  - akubra-qsc-0.4.0.jar Provides quiescing capability to a BlobStore [javadocs]
  - akubra-rmi-0.4.0.jar Allows a BlobStore to be exposed and accessed remotely, via RMI [javadocs]
     akubra-txn-0.4.0.jar Uses Derby to provide transactional capabilities over a non-transactional store [javadocs]
- Utilities
  - o akubra-tck-0.4.0.jar Technology Compatibility Kit for Akubra implementations [javadocs]

## **Known Third-Party Implementations**

- akubra-caringo Concrete implementation for the Dell DX Object Storage Platform
- · akubra-bhle Multiplexing implementation with short-term and long-term underlying stores
- atmosakubra-plugin Concrete implementation for Atmos Cloud Storage System
- akubra-hdfs Concrete implementation for Hadoop filesystems
- irods-akubra (TBD) IRODS implementation

## Community

We invite you browse our mailing lists, or subscribe and join the conversation:

- Akubra Users [subscribe via google or via email | view ]
   General information, questions, release announcements, etc.
- Akubra Developers [subscribe via google or via email | view | original list archive ]
   Discussions pertaining the development of Akubra.
- Akubra Codewatch [subscribe via google or via email | view ]
   Intended for developers, this <u>read-only</u> list provides automatic notification of commits to the source code repository.

### Source Code

The source source repository is hosted at github:

- Browse: https://github.com/akubra/akubra
- Anonymous Clone: git clone git://github.com/akubra/akubra.git
- · Committer Clone: git clone git@github.com:akubra/akubra.git

Note: You will need JDK 1.6+ and maven to build.

Coding conventions for this project are currently documented here (TODO:migrate here).

## Issue Tracking

Bugs and features for this project are tracked here.