

# 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:
  - 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**
  - [akubra-core-0.4.0.jar](#) - The Core Akubra API [[javadocs](#)]
- **Base Implementations**
  - [akubra-fs-0.4.0.jar](#) - Simple filesystem implementation (non-transactional) [[javadocs](#)]
  - [akubra-mem-0.4.0.jar](#) - In-memory implementation (non-transactional) [[javadocs](#)]
  - [akubra-www-0.4.0.jar](#) - Web implementation (non-transactional, read-only) [[javadocs](#)]
- **Layering Implementations**
  - [akubra-map-0.4.0.jar](#) - Wraps an existing BlobStore to provide a blob id mapping layer [[javadocs](#)]
  - [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**
  - [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 read-only 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](#).