The **flush** process synchronizes database state with session state by detecting state changes and executing SQL statements.

## Interface Session

public interface **Session**

extends [Serializable](http://java.sun.com/j2se/1.5.0/docs/api/java/io/Serializable.html?is-external=true)

The main runtime interface between a Java application and Hibernate. This is the central API class abstracting the notion of a persistence service.  
  
The lifecycle of a Session is bounded by the beginning and end of a logical transaction. (Long transactions might span several database transactions.)  
  
The main function of the Session is to offer create, read and delete operations for instances of mapped entity classes. Instances may exist in one of three states:  
  
*transient:* never persistent, not associated with any Session  
*persistent:* associated with a unique Session  
*detached:* previously persistent, not associated with any Session  
  
Transient instances may be made persistent by calling save(), persist() or saveOrUpdate(). Persistent instances may be made transient by calling delete(). Any instance returned by a get() or load() method is persistent. Detached instances may be made persistent by calling update(), saveOrUpdate(), lock() or replicate(). The state of a transient or detached instance may also be made persistent as a new persistent instance by calling merge().  
  
save() and persist() result in an SQL INSERT,

delete() in an SQL DELETE and update() or merge() in an SQL UPDATE.

Changes to *persistent* instances are detected at flush time and also result in an SQL UPDATE. saveOrUpdate() and replicate() result in either an INSERT or an UPDATE.  
  
It is not intended that implementors be threadsafe. Instead each thread/transaction should obtain its own instance from a SessionFactory.  
  
A Session instance is serializable if its persistent classes are serializable.  
  
A typical transaction should use the following idiom:

Session sess = factory.openSession();

Transaction tx;

try {

tx = sess.beginTransaction();

//do some work

...

tx.commit();

}

catch (Exception e) {

if (tx!=null) tx.rollback();

throw e;

}

finally {

sess.close();

}

If the Session throws an exception, the transaction must be rolled back and the session discarded. The internal state of the Session might not be consistent with the database after the exception occurs.

|  |  |
| --- | --- |
| **Method Summary** | |
| [Transaction](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Transaction.html) | [**beginTransaction**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#beginTransaction())()            Begin a unit of work and return the associated Transaction object. |
| [Session.LockRequest](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.LockRequest.html" \o "interface in org.hibernate) | [**buildLockRequest**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#buildLockRequest(org.hibernate.LockOptions))([LockOptions](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/LockOptions.html" \o "class in org.hibernate) lockOptions)            Build a LockRequest that specifies the LockMode, pessimistic lock timeout and lock scope. |
| void | [**cancelQuery**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#cancelQuery())()            Cancel the execution of the current query. |
| void | [**clear**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#clear())()            Completely clear the session. |
| [Connection](http://java.sun.com/j2se/1.5.0/docs/api/java/sql/Connection.html?is-external=true) | [**close**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#close())()            End the session by releasing the JDBC connection and cleaning up. |
| [Connection](http://java.sun.com/j2se/1.5.0/docs/api/java/sql/Connection.html?is-external=true) | [**connection**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#connection())()            **Deprecated.** *(scheduled for removal in 4.x). Replacement depends on need; for doing direct JDBC stuff use* [*doWork(org.hibernate.jdbc.Work)*](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#doWork(org.hibernate.jdbc.Work))*; for opening a 'temporary Session' use (TBD).* |
| boolean | [**contains**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#contains(java.lang.Object))([Object](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Object.html?is-external=true) object)            Check if this instance is associated with this Session. |
| [Criteria](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Criteria.html) | [**createCriteria**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#createCriteria(java.lang.Class))([Class](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Class.html?is-external=true) persistentClass)            Create a new Criteria instance, for the given entity class, or a superclass of an entity class. |
| [Criteria](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Criteria.html) | [**createCriteria**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#createCriteria(java.lang.Class, java.lang.String))([Class](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Class.html?is-external=true) persistentClass, [String](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/String.html?is-external=true) alias)            Create a new Criteria instance, for the given entity class, or a superclass of an entity class, with the given alias. |
| [Criteria](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Criteria.html) | [**createCriteria**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#createCriteria(java.lang.String))([String](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/String.html?is-external=true) entityName)            Create a new Criteria instance, for the given entity name. |
| [Criteria](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Criteria.html) | [**createCriteria**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#createCriteria(java.lang.String, java.lang.String))([String](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/String.html?is-external=true) entityName, [String](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/String.html?is-external=true) alias)            Create a new Criteria instance, for the given entity name, with the given alias. |
| [Query](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Query.html) | [**createFilter**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#createFilter(java.lang.Object, java.lang.String))([Object](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Object.html?is-external=true) collection, [String](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/String.html?is-external=true) queryString)            Create a new instance of Query for the given collection and filter string. |
| [Query](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Query.html) | [**createQuery**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#createQuery(java.lang.String))([String](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/String.html?is-external=true) queryString)            Create a new instance of Query for the given HQL query string. |
| [SQLQuery](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/SQLQuery.html" \o "interface in org.hibernate) | [**createSQLQuery**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#createSQLQuery(java.lang.String))([String](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/String.html?is-external=true) queryString)            Create a new instance of SQLQuery for the given SQL query string. |
| void | [**delete**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#delete(java.lang.Object))([Object](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Object.html?is-external=true) object)            Remove a persistent instance from the datastore. |
| void | [**delete**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#delete(java.lang.String, java.lang.Object))([String](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/String.html?is-external=true) entityName, [Object](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Object.html?is-external=true) object)            Remove a persistent instance from the datastore. |
| void | [**disableFetchProfile**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#disableFetchProfile(java.lang.String))([String](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/String.html?is-external=true) name)            Disable a particular fetch profile on this session. |
| void | [**disableFilter**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#disableFilter(java.lang.String))([String](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/String.html?is-external=true) filterName)            Disable the named filter for the current session. |
| [Connection](http://java.sun.com/j2se/1.5.0/docs/api/java/sql/Connection.html?is-external=true) | [**disconnect**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#disconnect())()            Disconnect the Session from the current JDBC connection. |
| void | [**doWork**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#doWork(org.hibernate.jdbc.Work))([Work](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/jdbc/Work.html) work)            Controller for allowing users to perform JDBC related work using the Connection managed by this Session. |
| void | [**enableFetchProfile**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#enableFetchProfile(java.lang.String))([String](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/String.html?is-external=true) name)            Enable a particular fetch profile on this session. |
| [Filter](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Filter.html) | [**enableFilter**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#enableFilter(java.lang.String))([String](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/String.html?is-external=true) filterName)            Enable the named filter for this current session. |
| void | [**evict**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#evict(java.lang.Object))([Object](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Object.html?is-external=true) object)            Remove this instance from the session cache. |
| void | [**flush**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#flush())()            Force this session to flush. |
| [Object](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Object.html?is-external=true) | [**get**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#get(java.lang.Class, java.io.Serializable))([Class](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Class.html?is-external=true) clazz, [Serializable](http://java.sun.com/j2se/1.5.0/docs/api/java/io/Serializable.html?is-external=true) id)            Return the persistent instance of the given entity class with the given identifier, or null if there is no such persistent instance. |
| [Object](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Object.html?is-external=true) | [**get**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#get(java.lang.Class, java.io.Serializable, org.hibernate.LockMode))([Class](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Class.html?is-external=true) clazz, [Serializable](http://java.sun.com/j2se/1.5.0/docs/api/java/io/Serializable.html?is-external=true) id, [LockMode](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/LockMode.html" \o "class in org.hibernate) lockMode)            **Deprecated.** *LockMode parameter should be replaced with LockOptions* |
| [Object](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Object.html?is-external=true) | [**get**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#get(java.lang.Class, java.io.Serializable, org.hibernate.LockOptions))([Class](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Class.html?is-external=true) clazz, [Serializable](http://java.sun.com/j2se/1.5.0/docs/api/java/io/Serializable.html?is-external=true) id, [LockOptions](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/LockOptions.html" \o "class in org.hibernate) lockOptions)            Return the persistent instance of the given entity class with the given identifier, or null if there is no such persistent instance. |
| [Object](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Object.html?is-external=true) | [**get**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#get(java.lang.String, java.io.Serializable))([String](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/String.html?is-external=true) entityName, [Serializable](http://java.sun.com/j2se/1.5.0/docs/api/java/io/Serializable.html?is-external=true) id)            Return the persistent instance of the given named entity with the given identifier, or null if there is no such persistent instance. |
| [Object](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Object.html?is-external=true) | [**get**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#get(java.lang.String, java.io.Serializable, org.hibernate.LockMode))([String](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/String.html?is-external=true) entityName, [Serializable](http://java.sun.com/j2se/1.5.0/docs/api/java/io/Serializable.html?is-external=true) id, [LockMode](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/LockMode.html" \o "class in org.hibernate) lockMode)            **Deprecated.** *LockMode parameter should be replaced with LockOptions* |
| [Object](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Object.html?is-external=true) | [**get**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#get(java.lang.String, java.io.Serializable, org.hibernate.LockOptions))([String](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/String.html?is-external=true) entityName, [Serializable](http://java.sun.com/j2se/1.5.0/docs/api/java/io/Serializable.html?is-external=true) id, [LockOptions](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/LockOptions.html) lockOptions)            Return the persistent instance of the given entity class with the given identifier, or null if there is no such persistent instance. |
| [CacheMode](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/CacheMode.html" \o "class in org.hibernate) | [**getCacheMode**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#getCacheMode())()            Get the current cache mode. |
| [LockMode](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/LockMode.html" \o "class in org.hibernate) | [**getCurrentLockMode**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#getCurrentLockMode(java.lang.Object))([Object](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Object.html?is-external=true) object)            Determine the current lock mode of the given object. |
| [Filter](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Filter.html) | [**getEnabledFilter**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#getEnabledFilter(java.lang.String))([String](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/String.html?is-external=true) filterName)            Retrieve a currently enabled filter by name. |
| [EntityMode](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/EntityMode.html" \o "class in org.hibernate) | [**getEntityMode**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#getEntityMode())()            Retrieve the entity mode in effect for this session. |
| [String](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/String.html?is-external=true) | [**getEntityName**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#getEntityName(java.lang.Object))([Object](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Object.html?is-external=true) object)            Return the entity name for a persistent entity |
| [FlushMode](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/FlushMode.html" \o "class in org.hibernate) | [**getFlushMode**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#getFlushMode())()            Get the current flush mode for this session. |
| [Serializable](http://java.sun.com/j2se/1.5.0/docs/api/java/io/Serializable.html?is-external=true) | [**getIdentifier**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#getIdentifier(java.lang.Object))([Object](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Object.html?is-external=true) object)            Return the identifier value of the given entity as associated with this session. |
| [Query](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Query.html) | [**getNamedQuery**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#getNamedQuery(java.lang.String))([String](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/String.html?is-external=true) queryName)            Obtain an instance of Query for a named query string defined in the mapping file. |
| [Session](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html) | [**getSession**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#getSession(org.hibernate.EntityMode))([EntityMode](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/EntityMode.html" \o "class in org.hibernate) entityMode)            Starts a new Session with the given entity mode in effect. |
| [SessionFactory](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/SessionFactory.html" \o "interface in org.hibernate) | [**getSessionFactory**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#getSessionFactory())()            Get the session factory which created this session. |
| [SessionStatistics](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/stat/SessionStatistics.html" \o "interface in org.hibernate.stat) | [**getStatistics**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#getStatistics())()            Get the statistics for this session. |
| [Transaction](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Transaction.html) | [**getTransaction**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#getTransaction())()            Get the Transaction instance associated with this session. |
| boolean | [**isConnected**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#isConnected())()            Check if the session is currently connected. |
| boolean | [**isDefaultReadOnly**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#isDefaultReadOnly())()            Will entities and proxies that are loaded into this session be made read-only by default? To determine the read-only/modifiable setting for a particular entity or proxy: |
| boolean | [**isDirty**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#isDirty())()            Does this session contain any changes which must be synchronized with the database? In other words, would any DML operations be executed if we flushed this session? |
| boolean | [**isFetchProfileEnabled**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#isFetchProfileEnabled(java.lang.String))([String](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/String.html?is-external=true) name)            Is a particular fetch profile enabled on this session? |
| boolean | [**isOpen**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#isOpen())()            Check if the session is still open. |
| boolean | [**isReadOnly**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#isReadOnly(java.lang.Object))([Object](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Object.html?is-external=true) entityOrProxy)            Is the specified entity or proxy read-only? To get the default read-only/modifiable setting used for entities and proxies that are loaded into the session: |
| [Object](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Object.html?is-external=true) | [**load**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#load(java.lang.Class, java.io.Serializable))([Class](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Class.html?is-external=true) theClass, [Serializable](http://java.sun.com/j2se/1.5.0/docs/api/java/io/Serializable.html?is-external=true) id)            Return the persistent instance of the given entity class with the given identifier, assuming that the instance exists. |
| [Object](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Object.html?is-external=true) | [**load**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#load(java.lang.Class, java.io.Serializable, org.hibernate.LockMode))([Class](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Class.html?is-external=true) theClass, [Serializable](http://java.sun.com/j2se/1.5.0/docs/api/java/io/Serializable.html?is-external=true) id, [LockMode](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/LockMode.html" \o "class in org.hibernate) lockMode)            **Deprecated.** *LockMode parameter should be replaced with LockOptions* |
| [Object](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Object.html?is-external=true) | [**load**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#load(java.lang.Class, java.io.Serializable, org.hibernate.LockOptions))([Class](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Class.html?is-external=true) theClass, [Serializable](http://java.sun.com/j2se/1.5.0/docs/api/java/io/Serializable.html?is-external=true) id, [LockOptions](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/LockOptions.html" \o "class in org.hibernate) lockOptions)            Return the persistent instance of the given entity class with the given identifier, obtaining the specified lock mode, assuming the instance exists. |
| void | [**load**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#load(java.lang.Object, java.io.Serializable))([Object](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Object.html?is-external=true) object, [Serializable](http://java.sun.com/j2se/1.5.0/docs/api/java/io/Serializable.html?is-external=true) id)            Read the persistent state associated with the given identifier into the given transient instance. |
| [Object](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Object.html?is-external=true) | [**load**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#load(java.lang.String, java.io.Serializable))([String](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/String.html?is-external=true) entityName, [Serializable](http://java.sun.com/j2se/1.5.0/docs/api/java/io/Serializable.html?is-external=true) id)            Return the persistent instance of the given entity class with the given identifier, assuming that the instance exists. |
| [Object](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Object.html?is-external=true) | [**load**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#load(java.lang.String, java.io.Serializable, org.hibernate.LockMode))([String](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/String.html?is-external=true) entityName, [Serializable](http://java.sun.com/j2se/1.5.0/docs/api/java/io/Serializable.html?is-external=true) id, [LockMode](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/LockMode.html" \o "class in org.hibernate) lockMode)            **Deprecated.** *LockMode parameter should be replaced with LockOptions* |
| [Object](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Object.html?is-external=true) | [**load**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#load(java.lang.String, java.io.Serializable, org.hibernate.LockOptions))([String](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/String.html?is-external=true) entityName, [Serializable](http://java.sun.com/j2se/1.5.0/docs/api/java/io/Serializable.html?is-external=true) id, [LockOptions](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/LockOptions.html) lockOptions)            Return the persistent instance of the given entity class with the given identifier, obtaining the specified lock mode, assuming the instance exists. |
| void | [**lock**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#lock(java.lang.Object, org.hibernate.LockMode))([Object](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Object.html?is-external=true) object, [LockMode](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/LockMode.html" \o "class in org.hibernate) lockMode)            **Deprecated.** *instead call buildLockRequest(LockMode).lock(object)* |
| void | [**lock**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#lock(java.lang.String, java.lang.Object, org.hibernate.LockMode))([String](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/String.html?is-external=true) entityName, [Object](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Object.html?is-external=true) object, [LockMode](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/LockMode.html" \o "class in org.hibernate) lockMode)            **Deprecated.** *instead call buildLockRequest(LockMode).lock(entityName, object)* |
| [Object](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Object.html?is-external=true) | [**merge**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#merge(java.lang.Object))([Object](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Object.html?is-external=true) object)            Copy the state of the given object onto the persistent object with the same identifier. |
| [Object](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Object.html?is-external=true) | [**merge**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#merge(java.lang.String, java.lang.Object))([String](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/String.html?is-external=true) entityName, [Object](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Object.html?is-external=true) object)            Copy the state of the given object onto the persistent object with the same identifier. |
| void | [**persist**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#persist(java.lang.Object))([Object](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Object.html?is-external=true) object)            Make a transient instance persistent. |
| void | [**persist**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#persist(java.lang.String, java.lang.Object))([String](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/String.html?is-external=true) entityName, [Object](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Object.html?is-external=true) object)            Make a transient instance persistent. |
| void | [**reconnect**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#reconnect())()            **Deprecated.** *Manual reconnection is only needed in the case of application-supplied connections, in which case the*[*reconnect(java.sql.Connection)*](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#reconnect(java.sql.Connection))*for should be used.* |
| void | [**reconnect**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#reconnect(java.sql.Connection))([Connection](http://java.sun.com/j2se/1.5.0/docs/api/java/sql/Connection.html?is-external=true) connection)            Reconnect to the given JDBC connection. |
| void | [**refresh**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#refresh(java.lang.Object))([Object](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Object.html?is-external=true) object)            Re-read the state of the given instance from the underlying database. |
| void | [**refresh**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#refresh(java.lang.Object, org.hibernate.LockMode))([Object](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Object.html?is-external=true) object, [LockMode](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/LockMode.html" \o "class in org.hibernate) lockMode)            **Deprecated.** *LockMode parameter should be replaced with LockOptions* |
| void | [**refresh**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#refresh(java.lang.Object, org.hibernate.LockOptions))([Object](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Object.html?is-external=true) object, [LockOptions](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/LockOptions.html" \o "class in org.hibernate) lockOptions)            Re-read the state of the given instance from the underlying database, with the given LockMode. |
| void | [**replicate**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#replicate(java.lang.Object, org.hibernate.ReplicationMode))([Object](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Object.html?is-external=true) object, [ReplicationMode](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/ReplicationMode.html" \o "class in org.hibernate) replicationMode)            Persist the state of the given detached instance, reusing the current identifier value. |
| void | [**replicate**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#replicate(java.lang.String, java.lang.Object, org.hibernate.ReplicationMode))([String](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/String.html?is-external=true) entityName, [Object](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Object.html?is-external=true) object, [ReplicationMode](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/ReplicationMode.html) replicationMode)            Persist the state of the given detached instance, reusing the current identifier value. |
| [Serializable](http://java.sun.com/j2se/1.5.0/docs/api/java/io/Serializable.html?is-external=true) | [**save**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#save(java.lang.Object))([Object](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Object.html?is-external=true) object)            Persist the given transient instance, first assigning a generated identifier. |
| [Serializable](http://java.sun.com/j2se/1.5.0/docs/api/java/io/Serializable.html?is-external=true) | [**save**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#save(java.lang.String, java.lang.Object))([String](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/String.html?is-external=true) entityName, [Object](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Object.html?is-external=true) object)            Persist the given transient instance, first assigning a generated identifier. |
| void | [**saveOrUpdate**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#saveOrUpdate(java.lang.Object))([Object](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Object.html?is-external=true) object)            Either [save(Object)](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#save(java.lang.Object)) or [update(Object)](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#update(java.lang.Object)) the given instance, depending upon resolution of the unsaved-value checks (see the manual for discussion of unsaved-value checking). |
| void | [**saveOrUpdate**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#saveOrUpdate(java.lang.String, java.lang.Object))([String](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/String.html?is-external=true) entityName, [Object](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Object.html?is-external=true) object)            Either [save(String, Object)](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#save(java.lang.String, java.lang.Object)) or [update(String, Object)](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#update(java.lang.String, java.lang.Object)) the given instance, depending upon resolution of the unsaved-value checks (see the manual for discussion of unsaved-value checking). |
| void | [**setCacheMode**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#setCacheMode(org.hibernate.CacheMode))([CacheMode](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/CacheMode.html" \o "class in org.hibernate) cacheMode)            Set the cache mode. |
| void | [**setDefaultReadOnly**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#setDefaultReadOnly(boolean))(boolean readOnly)            Change the default for entities and proxies loaded into this session from modifiable to read-only mode, or from modifiable to read-only mode. |
| void | [**setFlushMode**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#setFlushMode(org.hibernate.FlushMode))([FlushMode](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/FlushMode.html" \o "class in org.hibernate) flushMode)            Set the flush mode for this session. |
| void | [**setReadOnly**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#setReadOnly(java.lang.Object, boolean))([Object](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Object.html?is-external=true) entityOrProxy, boolean readOnly)            Set an unmodified persistent object to read-only mode, or a read-only object to modifiable mode. |
| void | [**update**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#update(java.lang.Object))([Object](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Object.html?is-external=true) object)            Update the persistent instance with the identifier of the given detached instance. |
| void | [**update**](http://docs.jboss.org/hibernate/orm/3.5/javadoc/org/hibernate/Session.html#update(java.lang.String, java.lang.Object))([String](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/String.html?is-external=true) entityName, [Object](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Object.html?is-external=true) object)            Update the persistent instance with the identifier of the given detached instance. |

**FlushMode**

public final class **FlushMode**

extends [Object](http://java.sun.com/j2se/1.5.0/docs/api/java/lang/Object.html?is-external=true)

implements [Serializable](http://java.sun.com/j2se/1.5.0/docs/api/java/io/Serializable.html?is-external=true)

Represents a flushing strategy. The flush process synchronizes database state with session state by detecting state changes and executing SQL statements.

|  |  |
| --- | --- |
| **Field Summary** | |
| static [FlushMode](http://docs.jboss.org/hibernate/orm/3.6/javadocs/org/hibernate/FlushMode.html" \o "class in org.hibernate) | [**ALWAYS**](http://docs.jboss.org/hibernate/orm/3.6/javadocs/org/hibernate/FlushMode.html#ALWAYS)            The [Session](http://docs.jboss.org/hibernate/orm/3.6/javadocs/org/hibernate/Session.html) is flushed before every query. |
| static [FlushMode](http://docs.jboss.org/hibernate/orm/3.6/javadocs/org/hibernate/FlushMode.html" \o "class in org.hibernate) | [**AUTO**](http://docs.jboss.org/hibernate/orm/3.6/javadocs/org/hibernate/FlushMode.html#AUTO)            The [Session](http://docs.jboss.org/hibernate/orm/3.6/javadocs/org/hibernate/Session.html) is sometimes flushed before query execution in order to ensure that queries never return stale state. |
| static [FlushMode](http://docs.jboss.org/hibernate/orm/3.6/javadocs/org/hibernate/FlushMode.html" \o "class in org.hibernate) | [**COMMIT**](http://docs.jboss.org/hibernate/orm/3.6/javadocs/org/hibernate/FlushMode.html#COMMIT)            The [Session](http://docs.jboss.org/hibernate/orm/3.6/javadocs/org/hibernate/Session.html) is flushed when [Transaction.commit()](http://docs.jboss.org/hibernate/orm/3.6/javadocs/org/hibernate/Transaction.html" \l "commit()) is called. |
| static [FlushMode](http://docs.jboss.org/hibernate/orm/3.6/javadocs/org/hibernate/FlushMode.html" \o "class in org.hibernate) | [**MANUAL**](http://docs.jboss.org/hibernate/orm/3.6/javadocs/org/hibernate/FlushMode.html#MANUAL)            The [Session](http://docs.jboss.org/hibernate/orm/3.6/javadocs/org/hibernate/Session.html) is only ever flushed when [Session.flush()](http://docs.jboss.org/hibernate/orm/3.6/javadocs/org/hibernate/Session.html" \l "flush()) is explicitly called by the application. |
| static [FlushMode](http://docs.jboss.org/hibernate/orm/3.6/javadocs/org/hibernate/FlushMode.html" \o "class in org.hibernate) | [**NEVER**](http://docs.jboss.org/hibernate/orm/3.6/javadocs/org/hibernate/FlushMode.html#NEVER)            **Deprecated.** *use*[*MANUAL*](http://docs.jboss.org/hibernate/orm/3.6/javadocs/org/hibernate/FlushMode.html#MANUAL)*instead.* |