ZooKeeper 3.1.0 Release Notes

Table of contents	
1 A note on API changes in 3.1	2
2 Changes Since ZooKeeper 3.0.1	2

These release notes include new developer and user facing incompatibilities, features, and major improvements.

See <u>3.0 release notes and migration instructions</u> if you are upgrading from version 2 of ZooKeeper (SourceForge) to version 3 or later.

1. A note on API changes in 3.1

In Java there were no b/w incompatible changes made in this release. However the C client code fixed an issue where the zoo_set(...) method was not providing access to a Stat structure when the method returned. The C API was modified in 3.1 to support client access of this information. Legacy client code (pre 3.1) can be easily migrated by passing null for this parameter if you have no interest.

2. Changes Since ZooKeeper 3.0.1

Issue	Notes
Incompatibilities	
ZOOKEEPER-255	zoo_set() api does not return stat datastructure.
ZOOKEEPER-246	review error code definition in both source and docs
New Feature	
ZOOKEEPER-135	Fat jar build target
ZOOKEEPER-215	expand system test environment
ZOOKEEPER-231	Quotas in zookeeper
ZOOKEEPER-256	support use of JMX to manage log4j configuration at runtime
ZOOKEEPER-276	Bookkeeper contribution
Task	
ZOOKEEPER-210	Require Java 6
Bug	
ZOOKEEPER-16	Need to do path validation
ZOOKEEPER-204	SetWatches needs to be the first message after

	auth messages to the server
ZOOKEEPER-205	Error on version-info when compiling from the tarball distribution
ZOOKEEPER-206	documentation tab should contain the version number (and other small site changes)
ZOOKEEPER-208	Zookeeper C client uses API that are not thread safe, causing crashes when multiple instances are active
ZOOKEEPER-209	nullpointerexception if election port is not specified.
ZOOKEEPER-212	snapshot is synchronous in 3.0
ZOOKEEPER-213	programmer guide C api docs are out of sync with latest zookeeper.h
ZOOKEEPER-218	error in barrier recipe example code
ZOOKEEPER-219	events.poll timeout in watcher test too short
ZOOKEEPER-221	log message in ZkWatchManager.materialize missing conditional
ZOOKEEPER-226	exists calls fails on server if node has null data
ZOOKEEPER-227	gcc warning from recordio.h
ZOOKEEPER-228	apache header missing in DBtest
ZOOKEEPER-232	testablezookeeper file is missing apache licence headers.
ZOOKEEPER-240	Yet another npe
ZOOKEEPER-241	Build of a distro fails after clean target is run
ZOOKEEPER-242	zookeeper c tests are faliling
ZOOKEEPER-245	update readme/quickstart to be release tar, rather than source, based
ZOOKEEPER-247	fix formatting of C API in ACL section of programmer guide
ZOOKEEPER-249	QuorumPeer.getClientPort() always returns -1
ZOOKEEPER-250	isvalidsnapshot should handle the case of 0
-	

	snapshot files better.
ZOOKEEPER-251	NullPointerException stopping and starting Zookeeper servers
ZOOKEEPER-252	PurgeTxnLog is not handling the new dataDir directory structure
ZOOKEEPER-253	documentation of DataWatcher state transition is misleading regarding auto watch reset on reconnect
ZOOKEEPER-254	there is currently no way for a user to test session expiration in their code
ZOOKEEPER-257	Review logging level for WARN/ERROR log messages, some misclassified
ZOOKEEPER-258	docs incorrectly state max client timeout as 60 seconds (it's based on server ticktime)
ZOOKEEPER-266	KeeperState missing javadoc for values
ZOOKEEPER-267	java client incorrectly generating syncdisconnected event when in disconnected state
ZOOKEEPER-268	tostring on jute generated objects can cause NPE
ZOOKEEPER-272	getChildren can fail for large numbers of children
ZOOKEEPER-273	Zookeeper c client build should not depend on CPPUNIT
ZOOKEEPER-275	Bug in FastLeaderElection
ZOOKEEPER-284	JMX doesn't get the clientPort correctly
ZOOKEEPER-285	the stat command does not return the correct mode
ZOOKEEPER-211	Not all Mock tests are working
ZOOKEEPER-291	regression for legacy code using KeeperException.Code constants (due to 246)
Improvement	
ZOOKEEPER-64	We should log system env information when intializing client/server

c interface is missing tests against java server
(mock only)
needed: docs for JMX
add new "stat reset" command to server admin port
handle errors when parsing config file, throw illegalargumentexception rather than exit()
programming guide watches section should clarify server/clientlib role in data/child watch maint.
print C client log message timestamp in human readable form
default log4j root logger configuration has neg perf impact with no benefit, change default level to INFO
c client should log an info message in zookeeper_init detailing connection parameters
improve documentation regarding user's responsibility to cleanup datadir (snaps/logs)
Improvements to FLE
Eliminate using statics to initialize the sever. Should allow server to be more embeddable in OSGi enviorments.
add SEQUENCE flag documentation to the programming guide
QuorumPeer should use Map interface instead of HashMap implementation.
cleanup the logging levels used (use the correct level) and messages generated
document the recommended values for server id's
document connection host:port as comma separated list in forrest docs
remove (deprecate) unused NoSyncConnected from KeeperState

ZOOKEEPER-269	connectionloss - add more documentation to detail
ZOOKEEPER-286	Make GenerateLoad use InstanceContainers
ZOOKEEPER-289	add debug messages to nioserver select loop.
ZOOKEEPER-161	Content needed: "Designing a ZooKeeper Deployment"
ZOOKEEPER-69	ZooKeeper logo

Table 1: Changes Since ZooKeeper 3.0.1