

Sub-task

- [HBASE-12748] - RegionCoprocesorHost.execOperation creates too many iterator objects
- [HBASE-13212] - Procedure V2 - master Create/Modify/Delete namespace
- [HBASE-13415] - Procedure V2 - Use nonces for double submits from client
- [HBASE-13470] - High level Integration test for master DDL operations
- [HBASE-13819] - Make RPC layer CellBlock buffer a DirectByteBuffer
- [HBASE-13832] - Procedure V2: master fail to start due to WALProcedureStore sync failures when HDFS data nodes count is low
- [HBASE-13909] - create 1.2 branch
- [HBASE-13920] - Exclude Java files generated from protobuf from javadoc
- [HBASE-13963] - avoid leaking jdk.tools
- [HBASE-13967] - add jdk profiles for jdk.tools dependency
- [HBASE-13973] - Update documentation for 10070 Phase 2 changes
- [HBASE-13990] - clean up remaining errors for maven site goal
- [HBASE-14003] - work around jdk8 spec bug in WALPerfEval
- [HBASE-14051] - Undo workarounds in IntegrationTestDDLMasterFailover for client double submit
- [HBASE-14086] - remove unused bundled dependencies
- [HBASE-14087] - ensure correct ASF policy compliant headers on source/docs
- [HBASE-14105] - Add shell tests for Snapshot
- [HBASE-14107] - Procedure V2 - Administrative Task: Provide an API to List all procedures
- [HBASE-14108] - Procedure V2 - Administrative Task: provide an API to abort a procedure
- [HBASE-14147] - REST Support for Namespaces
- [HBASE-14176] - Add missing headers to META-INF files
- [HBASE-14212] - Add IT test for procedure-v2-based namespace DDL
- [HBASE-14221] - Reduce the number of time row comparison is done in a Scan
- [HBASE-14239] - Branch-1.2 AM can get stuck when meta moves
- [HBASE-14274] - Deadlock in region metrics on shutdown: MetricsRegionSourceImpl vs MetricsRegionAggregateSourceImpl
- [HBASE-14278] - Fix NPE that is showing up since HBASE-14274 went in
- [HBASE-14378] - Get TestAccessController* passing again on branch-1
- [HBASE-14401] - Stamp failed appends with sequenceid too.... Cleans up latches
- [HBASE-14421] - TestFastFail* are flakey
- [HBASE-14423] - TestStochasticBalancerJmxMetrics.testJmxMetrics_PerTableMode:183 NullPointerException
- [HBASE-14428] - Upgrade our surefire-plugin from 2.18 to 2.18.1
- [HBASE-14430] - TestHttpServerLifecycle#testStartedServerIsAlive times out
- [HBASE-14432] - Procedure V2 - enforce ACL on procedure admin tasks
- [HBASE-14433] - Set down the client executor core thread count from 256 in tests
- [HBASE-14435] - thrift tests don't have test-specific hbase-site.xml so 'BindException: Address already in use' because info port is not turned off
- [HBASE-14447] - Spark tests failing: bind exception when putting up info server
- [HBASE-14464] - Removed unused fs code
- [HBASE-14465] - Backport 'Allow rowlock to be reader/write' to branch-1
- [HBASE-14472] - TestHCM and TestRegionServerNoMaster fixes
- [HBASE-14484] - Follow-on from HBASE-14421, just disable TestFastFail* until someone digs in and fixes it
- [HBASE-14487] - Procedure V2 - shell command to list all procedures
- [HBASE-14488] - Procedure V2 - shell command to abort a procedure
- [HBASE-14513] - TestBucketCache runs obnoxious 1k threads in a unit test
- [HBASE-14519] - Purge TestFavoredNodeAssignmentHelper, a test for an abandoned feature that can hang
- [HBASE-14535] - Integration test for rpc connection concurrency / deadlock testing
- [HBASE-14539] - Slight improvement of StoreScanner.optimize
- [HBASE-14559] - branch-1 test tweaks; disable assert explicit region lands post-restart and up a few handlers
- [HBASE-14561] - Disable zombie TestReplicationShell
- [HBASE-14563] - Disable zombie TestHFileOutputFormat2
- [HBASE-14571] - Purge TestProcessBasedCluster; it does nothing and then fails
- [HBASE-14572] - TestImportExport#testImport94Table can't find its src data file
- [HBASE-14575] - Relax region read lock for compactions
- [HBASE-14585] - Clean up TestSnapshotCloneIndependence
- [HBASE-14596] - TestCellACLs failing... on 1.2 builds
- [HBASE-14600] - Make #testWalRollOnLowReplication looser still
- [HBASE-14605] - Split fails due to 'No valid credentials' error when SecureBulkLoadEndpoint#start tries to access hdfs
- [HBASE-14622] - Purge TestZkLess* tests from branch-1
- [HBASE-14631] - Region merge request should be audited with request user through proper scope of doAs() calls to region observer notifications
- [HBASE-14637] - Loosen TestChoreService assert AND have TestDataBlockEncoders do less work (and add timeouts)
- [HBASE-14646] - Move TestCellACLs from medium to large category
- [HBASE-14647] - Disable TestWALProcedureStoreOnHDFS#testWalRollOnLowReplication
- [HBASE-14648] - Reenable TestWALProcedureStoreOnHDFS#testWalRollOnLowReplication
- [HBASE-14655] - Narrow the scope of doAs() calls to region observer notifications for compaction
- [HBASE-14656] - Move TestAssignmentManager from medium to large category

- [HBASE-14657] - Remove unneeded API from EncodedSeeker
- [HBASE-14662] - Fix NPE in HFileOutputFormat2
- [HBASE-14698] - Set category timeouts on TestScanner and TestNamespaceAuditor
- [HBASE-14702] - TestZKProcedureControllers.testZKCoordinatorControllerWithSingleMemberCohort is a flakey
- [HBASE-14709] - Parent change breaks graceful_stop.sh on a cluster
- [HBASE-14710] - Add category-based timeouts to MR tests
- [HBASE-14720] - Make TestHCM and TestMetaWithReplicas large tests rather than mediums
- [HBASE-14734] - BindException when setting up MiniKdc
- [HBASE-14786] - TestProcedureAdmin hangs
- [HBASE-14794] - Cleanup TestAtomicOperation, TestImportExport, and TestMetaWithReplicas
- [HBASE-14798] - NPE reporting server load causes regionserver abort; causes TestAcidGuarantee to fail
- [HBASE-14819] - hbase-it tests failing with OOME; permgen
- [HBASE-14837] - Procedure V2 - Procedure Queue Improvement
- [HBASE-14863] - Add missing test/resources/log4j files in hbase modules
- [HBASE-14877] - maven archetype: client application
- [HBASE-14878] - maven archetype: client application with shaded jars
- [HBASE-14883] - TestSplitTransactionOnCluster#testFailedSplit flakey
- [HBASE-14908] - TestRowCounter flakey especially on branch-1
- [HBASE-14909] - NPE testing for RIT
- [HBASE-14915] - Hanging test : org.apache.hadoop.hbase.mapreduce.TestImportExport
- [HBASE-14949] - Resolve name conflict when splitting if there are duplicated WAL entries
- [HBASE-14955] - OOME: cannot create native thread is back
- [HBASE-14962] - TestSplitWalDataLoss fails on all branches
- [HBASE-15023] - Reenable TestShell and TestStochasticLoadBalancer
- [HBASE-15087] - Fix hbase-common findbugs complaints
- [HBASE-15091] - Forward-port to 1.2+ HBASE-15031 "Fix merge of MVCC and SequenceID performance regression in branch-1.0 for Increments"
- [HBASE-15105] - Procedure V2 - Procedure Queue with Namespaces
- [HBASE-15106] - Procedure V2 - Procedure Queue pass Procedure for better debuggability
- [HBASE-15113] - Procedure v2 - Speedup eviction of sys operation results
- [HBASE-15114] - NPE when IPC server ByteBuffer reservoir is turned off
- [HBASE-15115] - Fix findbugs complaints in hbase-client
- [HBASE-15118] - Fix findbugs complaint in hbase-server
- [HBASE-15142] - Procedure v2 - Basic WebUI listing the procedures
- [HBASE-15144] - Procedure v2 - Web UI displaying Store state
- [HBASE-15157] - Add *PerformanceTest for Append, CheckAnd*
- [HBASE-15163] - Add sampling code and metrics for get/scan/multi/mutate count separately
- [HBASE-15171] - Avoid counting duplicate kv and generating lots of small hfiles in PutSortReducer
- [HBASE-15194] - TestStochasticLoadBalancer.testRegionReplicationOnMidClusterSameHosts flaky on trunk
- [HBASE-15202] - Reduce garbage while setting response
- [HBASE-15203] - Reduce garbage created by path.toString() during Checksum verification
- [HBASE-15204] - Try to estimate the cell count for adding into WALEdit
- [HBASE-15210] - Undo aggressive load balancer logging at tens of lines per millisecond
- [HBASE-15224] - Undo "hbase.increment.fast.but.narrow.consistency" option; it is not necessary since HBASE-15213
- [HBASE-15232] - Exceptions returned over multi RPC don't automatically trigger region location reloads
- [HBASE-15238] - HFileReaderV2 prefetch overreaches; runs off the end of the data
- [HBASE-15263] - TestIPv6NIOServerSocketChannel.testServerSocketFromLocalhostResolution can hang indefinitely
- [HBASE-15270] - Use appropriate encoding for "filter" field in TaskMonitorTmpl.jamon
- [HBASE-15311] - Prevent NPE in BlockCacheViewTmpl
- [HBASE-15347] - Update CHANGES.txt for 1.3
- [HBASE-15351] - Fix description of hbase.bucketcache.size in hbase-default.xml
- [HBASE-15354] - Use same criteria for clearing meta cache for all operations
- [HBASE-15365] - Do not write to '/tmp' in TestHBaseConfiguration
- [HBASE-15366] - Add doc, trace-level logging, and test around hfileblock
- [HBASE-15368] - Add pluggable window support
- [HBASE-15371] - Procedure V2 - Completed support parent-child procedure
- [HBASE-15373] - DEPRECATED_NAME_OF_NO_LIMIT_THROUGHPUT_CONTROLLER_CLASS value is wrong in CompactionThroughputControllerFactory
- [HBASE-15376] - ScanNext metric is size-based while every other per-operation metric is time based
- [HBASE-15377] - Per-RS Get metric is time based, per-region metric is size-based
- [HBASE-15384] - Avoid using '/tmp' directory in TestBulkLoad
- [HBASE-15389] - Write out multiple files when compaction
- [HBASE-15390] - Unnecessary MetaCache evictions cause elevated number of requests to meta
- [HBASE-15392] - Single Cell Get reads two HFileBlocks
- [HBASE-15400] - Use DateTieredCompactor for Date Tiered Compaction
- [HBASE-15412] - Add average region size metric
- [HBASE-15422] - Procedure v2 - Avoid double yield
- [HBASE-15435] - Add WAL (in bytes) written metric
- [HBASE-15460] - Fix infer issues in hbase-common
- [HBASE-15464] - Flush / Compaction metrics revisited
- [HBASE-15477] - Do not save 'next block header' when we cache hfileblocks
- [HBASE-15479] - No more garbage or beware of autoboxing

- [HBASE-15488] - Add ACL for setting split merge switch
- [HBASE-15518] - Add Per-Table metrics back
- [HBASE-15524] - Fix NPE in client-side metrics
- [HBASE-15527] - Refactor Compactor related classes
- [HBASE-15537] - Make multi WAL work with WALs other than FSHLog
- [HBASE-15640] - L1 cache doesn't give fair warning that it is showing partial stats only when it hits limit
- [HBASE-15658] - RegionServerCallable / RpcRetryingCaller clear meta cache on retries
- [HBASE-15665] - Support using different StoreFileComparators for different CompactionPolicies
- [HBASE-15671] - Add per-table metrics on memstore, storefile and regionsize
- [HBASE-15683] - Min latency in latency histograms are emitted as Long.MAX_VALUE
- [HBASE-15713] - Backport "HBASE-15477 Do not save 'next block header' when we cache hfileblocks"
- [HBASE-15740] - Replication source.shippedKBs metric is undercounting because it is in KB
- [HBASE-15865] - Move TestTableDeleteFamilyHandler and TestTableDescriptorModification handler tests to procedure
- [HBASE-15872] - Split TestWALProcedureStore
- [HBASE-15878] - Deprecate doBulkLoad(Path hfileDir, final HTable table) in branch-1 (even though its 'late')
- [HBASE-15935] - Have a separate Walker task running concurrently with Generator
- [HBASE-15971] - Regression: Random Read/WorkloadC slower in 1.x than 0.98
- [HBASE-15984] - Given failure to parse a given WAL that was closed cleanly, replay the WAL.
- [HBASE-16023] - Fastpath for the FIFO rpcscheduler
- [HBASE-16034] - Fix ProcedureTestingUtility#LoadCounter.setMaxProclid()
- [HBASE-16056] - Procedure v2 - fix master crash for FileNotFound
- [HBASE-16068] - Procedure v2 - use consts for conf properties in tests
- [HBASE-16101] - Procedure v2 - Perf Tool for WAL
- [HBASE-16146] - Counters are expensive...
- [HBASE-16176] - Bug fixes/improvements on HBASE-15650 Remove TimeRangeTracker as point of contention when many threads reading a StoreFile
- [HBASE-16180] - Fix ST_WRITE_TO_STATIC_FROM_INSTANCE_METHOD findbugs introduced by parent
- [HBASE-16189] - [Rolling Upgrade] 2.0 hfiles cannot be opened by 1.x servers
- [HBASE-16194] - Should count in MSLAB chunk allocation into heap size change when adding duplicate cells
- [HBASE-16195] - Should not add chunk into chunkQueue if not using chunk pool in HeapMemStoreLAB
- [HBASE-16285] - Drop RPC requests if it must be considered as timeout at client
- [HBASE-16317] - revert all ESAPI changes
- [HBASE-16318] - fail build if license isn't in whitelist
- [HBASE-16321] - Ensure findbugs jsr305 jar isn't present
- [HBASE-16452] - Procedure v2 - Make ProcedureWALPrettyPrinter extend Tool
- [HBASE-16485] - Procedure V2 - Add support to addChildProcedure() as last "step" in StateMachineProcedure
- [HBASE-16522] - Procedure v2 - Cache system user and avoid IOException
- [HBASE-16951] - 1.3 assembly scripts dont package hbase-archetypes in the tarball
- [HBASE-16970] - Clarify misleading Scan.java comment about caching
- [HBASE-17017] - Remove the current per-region latency histogram metrics
- [HBASE-17149] - Procedure V2 - Fix nonce submission to avoid unnecessary calling coprocessor multiple times
- [HBASE-17409] - Re-fix XSS request issue in JMXJsonServlet
- [HBASE-17651] - Add a flag for grant ruby shell command to merge existing permissions.

Brainstorming

- [HBASE-14869] - Better request latency and size histograms

Bug

- [HBASE-5878] - Use getVisibleLength public api from HdfsDataInputStream from Hadoop-2.
- [HBASE-10844] - Coprocessor failure during batchmutation leaves the memstore datastructs in an inconsistent state
- [HBASE-11625] - Reading datablock throws "Invalid HFile block magic" and can not switch to hdfs checksum
- [HBASE-12865] - WALs may be deleted before they are replicated to peers
- [HBASE-13082] - Coarsen StoreScanner locks to RegionScanner
- [HBASE-13143] - TestCacheOnWrite is flaky and needs a diet
- [HBASE-13250] - chown of ExportSnapshot does not cover all path and files
- [HBASE-13318] - RpcServer.getListenerAddress should handle when the accept channel is closed
- [HBASE-13324] - o.a.h.h.Coprocessor should be LimitedPrivate("Coprocessor")
- [HBASE-13330] - Region left unassigned due to AM & SSH each thinking the assignment would be done by the other
- [HBASE-13337] - Table regions are not assigning back, after restarting all regionservers at once.
- [HBASE-13352] - Add hbase.import.version to Import usage.
- [HBASE-13480] - ShortCircuitConnection doesn't short-circuit all calls as expected
- [HBASE-13706] - CoprocessorClassLoader should not exempt Hive classes
- [HBASE-13744] - TestCorruptedRegionStoreFile is flaky
- [HBASE-13770] - Programmatic JAAS configuration option for secure zookeeper may be broken
- [HBASE-13825] - Use ProtobufUtil#mergeFrom and ProtobufUtil#mergeDelimitedFrom in place of builder methods of same name
- [HBASE-13835] - KeyValueHeap.current might be in heap when exception happens in pollRealKV
- [HBASE-13858] - RS/MasterDumpServlet dumps threads before its "Stacks" header
- [HBASE-13863] - Multi-wal feature breaks reported number and size of HLogs
- [HBASE-13865] - Increase the default value for hbase.hregion.memstore.block.multiplier from 2 to 4 (part 2)

- [HBASE-13881] - Bug in HTable#incrementColumnValue implementation
- [HBASE-13885] - ZK watches leaks during snapshots
- [HBASE-13889] - Fix hbase-shaded-client artifact so it works on hbase-downstreamer
- [HBASE-13897] - OOM may occur when Import imports a row with too many KeyValues
- [HBASE-13906] - Improve handling of NeedUnmanagedConnectionException
- [HBASE-13918] - Fix hbase:namespace description in webUI
- [HBASE-13933] - DBE's seekBefore with tags corrupts the tag's offset information thus leading to incorrect results
- [HBASE-13935] - Orphaned namespace table ZK node should not prevent master to start
- [HBASE-13938] - Deletes done during the region merge transaction may get eclipsed
- [HBASE-13945] - Prefix_Tree seekBefore() does not work correctly
- [HBASE-13958] - RESTApiClusterManager calls kill() instead of suspend() and resume()
- [HBASE-13959] - Region splitting uses a single thread in most common cases
- [HBASE-13966] - Limit column width in table.jsp
- [HBASE-13969] - AuthenticationTokenSecretManager is never stopped in RPCServer
- [HBASE-13971] - Flushes stuck since 6 hours on a regionserver.
- [HBASE-13974] - TestRateLimiter#testFixedIntervalResourceAvailability may fail
- [HBASE-13982] - Add info for visibility labels/cell TTLs to ImportTsv
- [HBASE-13988] - Add exception handler for lease thread
- [HBASE-13989] - Threshold for combined MemStore and BlockCache percentages is not checked
- [HBASE-13997] - ScannerCallableWithReplicas cause Infinitely blocking
- [HBASE-14000] - Region server failed to report to Master and was stuck in reportForDuty retry loop
- [HBASE-14005] - Set permission to .top hfile in LoadIncrementalHFiles
- [HBASE-14012] - Double Assignment and Dataloss when ServerCrashProcedure runs during Master failover
- [HBASE-14021] - Quota table has a wrong description on the UI
- [HBASE-14041] - Client MetaCache is cleared if a ThrottlingException is thrown
- [HBASE-14042] - Fix FATAL level logging in FSHLog where logged for non fatal exceptions
- [HBASE-14054] - Acknowledged writes may get lost if regionserver clock is set backwards
- [HBASE-14077] - Add package to hbase-protocol protobuf files.
- [HBASE-14089] - Remove unnecessary draw of system entropy from RecoverableZooKeeper
- [HBASE-14092] - hbck should run without locks by default and only disable the balancer when necessary
- [HBASE-14094] - Procedure.proto can't be compiled to C++
- [HBASE-14100] - Fix high priority findbugs warnings
- [HBASE-14109] - NPE if we don't load fully before we are shutdown
- [HBASE-14115] - Fix resource leak in HMasterCommandLine
- [HBASE-14143] - remove obsolete maven repositories
- [HBASE-14145] - Allow the Canary in regionserver mode to try all regions on the server, not just one
- [HBASE-14146] - Once replication sees an error it slows down forever
- [HBASE-14153] - Typo in ProcedureManagerHost.MASTER_PROCEUDRE_CONF_KEY
- [HBASE-14155] - StackOverflowError in reverse scan
- [HBASE-14157] - Interfaces implemented by subclasses should be checked when registering CoprocessorService
- [HBASE-14162] - Fixing maven target for regenerating thrift classes fails against 0.9.2
- [HBASE-14166] - Per-Region metrics can be stale
- [HBASE-14168] - Avoid useless retry for DoNotRetryIOException in TableRecordReaderImpl
- [HBASE-14185] - Incorrect region names logged by MemStoreFlusher
- [HBASE-14192] - Fix REST Cluster constructor with String List
- [HBASE-14196] - Thrift server idle connection timeout issue
- [HBASE-14205] - RegionCoprocessorHost System.nanoTime() performance bottleneck
- [HBASE-14206] - MultiRowRangeFilter returns records whose rowKeys are out of allowed ranges
- [HBASE-14209] - TestShell visibility tests failing
- [HBASE-14211] - Add more rigorous integration tests of splits
- [HBASE-14214] - list_labels shouldn't raise ArgumentError if no labels are defined
- [HBASE-14219] - src tgz no longer builds after HBASE-14085
- [HBASE-14224] - Fix coprocessor handling of duplicate classes
- [HBASE-14228] - Close BufferedMutator and connection in MultiTableOutputFormat
- [HBASE-14229] - Flushing canceled by coprocessor still leads to memstoreSize set down
- [HBASE-14234] - Procedure-V2: Exception encountered in WALProcedureStore#rollWriter() should be properly handled
- [HBASE-14241] - Fix deadlock during cluster shutdown due to concurrent connection close
- [HBASE-14243] - Incorrect NOTICE file in hbase-it test-jar
- [HBASE-14249] - shaded jar modules create spurious source and test jars with incorrect LICENSE/NOTICE info
- [HBASE-14250] - branch-1.1 hbase-server test-jar has incorrect LICENSE
- [HBASE-14251] - javadoc jars use LICENSE/NOTICE from primary artifact
- [HBASE-14252] - RegionServers fail to start when setting hbase.ipc.server.callqueue.scan.ratio to 0
- [HBASE-14256] - Flush task message may be confusing when region is recovered
- [HBASE-14257] - Periodic flusher only handles hbase:meta, not other system tables
- [HBASE-14258] - Make region_mover.rb script case insensitive with regard to hostname
- [HBASE-14269] - FuzzyRowFilter omits certain rows when multiple fuzzy keys exist
- [HBASE-14273] - Rename MVCC to MVCC: From MultiVersionConsistencyControl to MultiVersionConcurrencyControl
- [HBASE-14280] - Bulk Upload from HA cluster to remote HA hbase cluster fails
- [HBASE-14283] - Reverse scan doesn't work with HFile inline index/bloom blocks
- [HBASE-14287] - Bootstrapping a cluster leaves temporary WAL directory laying around
- [HBASE-14291] - NPE On StochasticLoadBalancer Balance Involving RS With No Regions
- [HBASE-14302] - TableSnapshotInputFormat should not create back references when restoring snapshot

- [HBASE-14313] - After a Connection sees ConnectionClosingException it never recovers
- [HBASE-14315] - Save one call to KeyValueHeap.peek per row
- [HBASE-14317] - Stuck FSHLog: bad disk (HDFS-8960) and can't roll WAL
- [HBASE-14338] - License notification misspells 'Asciidoctor'
- [HBASE-14342] - Recursive call in RegionMergeTransactionImpl.getJournal()
- [HBASE-14343] - Fix debug message in SimpleRegionNormalizer for small regions
- [HBASE-14349] - pre-commit zombie finder is overly broad
- [HBASE-14354] - Minor improvements for usage of the mlock agent
- [HBASE-14359] - HTable#close will hang forever if unchecked error/exception thrown in AsyncProcess#sendMultiAction
- [HBASE-14362] - org.apache.hadoop.hbase.master.procedure.TestWALProcedureStoreOnHDFS is super duper flaky
- [HBASE-14366] - NPE in case visibility expression is not present in labels table during importtsv run
- [HBASE-14367] - Add normalization support to shell
- [HBASE-14370] - Use separate thread for calling ZKPermissionWatcher#refreshNodes()
- [HBASE-14380] - Correct data gets skipped along with bad data in importTsv bulk load thru TsvImporterTextMapper
- [HBASE-14382] - TestInterfaceAudienceAnnotations should hadoop-compt module resources
- [HBASE-14385] - Close the sockets that is missing in connection closure.
- [HBASE-14392] - [tests] TestLogRollingNoCluster fails on master from time to time
- [HBASE-14393] - Have TestHFileEncryption clean up after itself so it don't go all zombie on us
- [HBASE-14394] - Properly close the connection after reading records from table.
- [HBASE-14400] - Fix HBase RPC protection documentation
- [HBASE-14407] - NotServingRegion: hbase region closed forever
- [HBASE-14411] - Fix unit test failures when using multiwal as default WAL provider
- [HBASE-14425] - In Secure Zookeeper cluster superuser will not have sufficient permission if multiple values are configured in "hbase.superuser"
- [HBASE-14431] - AsyncRpcClient#removeConnection() never removes connection from connections pool if server fails
- [HBASE-14437] - ArithmeticException in ReplicationInterClusterEndpoint
- [HBASE-14445] - ExportSnapshot does not honor -chmod option
- [HBASE-14449] - Rewrite deadlock prevention for concurrent connection close
- [HBASE-14460] - [Perf Regression] Merge of MVCC and SequenceId (HBASE-8763) slowed Increments, CheckAndPuts, batch operations
- [HBASE-14463] - Severe performance downgrade when parallel reading a single key from BucketCache
- [HBASE-14471] - Thrift - HTTP Error 413 full HEAD if using kerberos authentication
- [HBASE-14473] - Compute region locality in parallel
- [HBASE-14475] - Region split requests are always audited with "hbase" user rather than request user
- [HBASE-14485] - ConnectionImplementation leaks on construction failure
- [HBASE-14486] - Disable TestRegionPlacement, a flakey test for an unfinished feature
- [HBASE-14489] - postScannerFilterRow consumes a lot of CPU
- [HBASE-14492] - Increase REST server header buffer size from 8k to 64k
- [HBASE-14494] - Wrong usage messages on shell commands
- [HBASE-14497] - Reverse Scan threw StackOverflow caused by readPt checking
- [HBASE-14501] - NPE in replication when HDFS transparent encryption is enabled.
- [HBASE-14510] - Can not set coprocessor from Shell after HBASE-14224
- [HBASE-14512] - Cache UGI groups
- [HBASE-14518] - Give TestScanEarlyTermination the same treatment as 'HBASE-14378 Get TestAccessController* passing again...' -- up priority handlers
- [HBASE-14525] - Append and increment operation throws NullPointerException on non-existing column families.
- [HBASE-14531] - graceful_stop.sh "if ["\$local"]" condition unexpected behaviour
- [HBASE-14536] - Balancer & SSH interfering with each other leading to unavailability
- [HBASE-14541] - TestHFileOutputFormat.testMRIncrementalLoadWithSplit failed due to too many splits and few retries
- [HBASE-14544] - Allow HConnectionImpl to not refresh the dns on errors
- [HBASE-14545] - TestMasterFailover often times out
- [HBASE-14557] - MapReduce WALPlayer issue with NoTagsKeyValue
- [HBASE-14578] - URISyntaxException during snapshot restore for table with user defined namespace
- [HBASE-14581] - Znode cleanup throws auth exception in secure mode
- [HBASE-14591] - Region with reference hfile may split after a forced split in IncreasingToUpperBoundRegionSplitPolicy
- [HBASE-14592] - BatchRestartRsAction always restarts 0 RS when running SlowDeterministicMonkey
- [HBASE-14594] - Use new DNS API introduced in HADOOP-12437
- [HBASE-14597] - Fix Groups cache in multi-threaded env
- [HBASE-14598] - ByteBufferOutputStream grows its HeapByteBuffer beyond JVM limitations
- [HBASE-14604] - Improve MoveCostFunction in StochasticLoadBalancer
- [HBASE-14606] - TestSecureLoadIncrementalHFiles tests timed out in trunk build on apache
- [HBASE-14608] - testWalRollOnLowReplication has some risk to assert failed after HBASE-14600
- [HBASE-14624] - BucketCache.freeBlock is too expensive
- [HBASE-14625] - Chaos Monkey should shut down faster
- [HBASE-14632] - Region server aborts due to unguarded dereference of Reader
- [HBASE-14633] - Try fluid width UI
- [HBASE-14634] - Disable flakey TestSnapshotCloneIndependence.testOnlineSnapshotDeleteIndependent
- [HBASE-14644] - Region in transition metric is broken
- [HBASE-14658] - Allow loading a MonkeyFactory by class name
- [HBASE-14661] - RegionServer link is not opening, in HBase Table page.
- [HBASE-14663] - HStore::close does not honor config hbase.rs.evictblocksonclose
- [HBASE-14674] - Rpc handler / task monitoring seems to be broken after 0.98
- [HBASE-14680] - Two configs for snapshot timeout and better defaults

- [HBASE-14682] - CM restore functionality for region servers is broken
- [HBASE-14689] - Addendum and unit test for HBASE-13471
- [HBASE-14690] - Fix css so there's no left/right scroll bar
- [HBASE-14694] - Scan copy constructor doesn't handle allowPartialResults
- [HBASE-14705] - Javadoc for KeyValue constructor is not correct.
- [HBASE-14706] - RegionLocationFinder should return multiple servernames by top host
- [HBASE-14712] - MasterProcWALs never clean up
- [HBASE-14717] - enable_table_replication command should only create specified table for a peer cluster
- [HBASE-14723] - Fix IT tests split too many times
- [HBASE-14733] - Minor typo in alter_namespace.rb
- [HBASE-14737] - Clear cachedMaxVersions when HColumnDescriptor#setValue(VERSIONS, value) is called
- [HBASE-14742] - TestHeapMemoryManager is flakey
- [HBASE-14745] - Shade the last few dependencies in hbase-shaded-client
- [HBASE-14754] - TestFastFailWithoutTestUtil failing on trunk now in #testPreemptiveFastFailException50Times
- [HBASE-14759] - Avoid using Math.abs when selecting SyncRunner in FSHLog
- [HBASE-14761] - Deletes with and without visibility expression do not delete the matching mutation
- [HBASE-14768] - bin/graceful_stop.sh logs nothing as a balancer state to be stored
- [HBASE-14771] - RpcServer#getRemoteAddress always returns null
- [HBASE-14773] - Fix HBase shell tests are skipped when skipping server tests.
- [HBASE-14777] - Fix Inter Cluster Replication Future ordering issues
- [HBASE-14778] - Make block cache hit percentages not integer in the metrics system
- [HBASE-14781] - Turn per cf flushing on for ITBLL by default
- [HBASE-14782] - FuzzyRowFilter skips valid rows
- [HBASE-14784] - Port conflict is not resolved in HBaseTestingUtility.randomFreePort()
- [HBASE-14788] - Splitting a region does not support the hbase.rs.evictblocksonclose config when closing source region
- [HBASE-14793] - Allow limiting size of block into L1 block cache.
- [HBASE-14799] - Commons-collections object deserialization remote command execution vulnerability
- [HBASE-14802] - Replaying server crash recovery procedure after a failover causes incorrect handling of dead servers
- [HBASE-14804] - HBase shell's create table command ignores 'NORMALIZATION_ENABLED' attribute
- [HBASE-14806] - Missing sources.jar for several modules when building HBase
- [HBASE-14807] - TestWALLockup is flakey
- [HBASE-14809] - Grant / revoke Namespace admin permission to group
- [HBASE-14812] - Fix ResultBoundedCompletionService deadlock
- [HBASE-14818] - user_permission does not list namespace permissions
- [HBASE-14822] - Renewing leases of scanners doesn't work
- [HBASE-14824] - HBaseAdmin.mergeRegions should recognize both full region names and encoded region names
- [HBASE-14840] - Sink cluster reports data replication request as success though the data is not replicated
- [HBASE-14867] - SimpleRegionNormalizer needs to have better heuristics to trigger merge operation
- [HBASE-14875] - Forward port HBASE-14207 'Region was hijacked and remained in transition when RS failed to open a region and later regionplan changed to new RS on retry'
- [HBASE-14885] - NullPointerException in HMaster#normalizeRegions() due to missing TableDescriptor
- [HBASE-14893] - Race between mutation on region and region closing operation leads to NotServingRegionException
- [HBASE-14894] - Fix misspellings of threshold in log4j.properties files for tests
- [HBASE-14904] - Mark Base[En]Decoder LimitedPrivate and fix binary compat issue
- [HBASE-14905] - VerifyReplication does not honour versions option
- [HBASE-14922] - Delayed flush doesn't work causing flush storms.
- [HBASE-14923] - VerifyReplication should not mask the exception during result comparison
- [HBASE-14926] - Hung ThriftServer; no timeout on read from client; if client crashes, worker thread gets stuck reading
- [HBASE-14928] - Start row should be set for query through HBase REST gateway involving globbing option
- [HBASE-14929] - There is a space missing from Table "foo" is not currently available.
- [HBASE-14930] - check_compatibility.sh needs smarter exit codes
- [HBASE-14936] - CombinedBlockCache should overwrite CacheStats#rollMetricsPeriod()
- [HBASE-14940] - Make our unsafe based ops more safe
- [HBASE-14942] - Allow turning off BoundedByteBufferPool
- [HBASE-14952] - hbase-assembly source artifact has some incorrect modules
- [HBASE-14953] - HBaseInterClusterReplicationEndpoint: Do not retry the whole batch of edits in case of RejectedExecutionException
- [HBASE-14954] - IllegalArgumentException was thrown when doing online configuration change in CompactSplitThread
- [HBASE-14960] - Fallback to using default RPCControllerFactory if class cannot be loaded
- [HBASE-14965] - Remove un-used hbase-spark in branch-1 +
- [HBASE-14968] - ConcurrentModificationException in region close resulting in the region staying in closing state
- [HBASE-14970] - Backport HBASE-13082 and its sub-jira to branch-1
- [HBASE-14974] - Total number of Regions in Transition number on UI incorrect
- [HBASE-14975] - Don't color the total RIT line yellow if it's zero
- [HBASE-14977] - ChoreService.shutdown may result in ConcurrentModificationException
- [HBASE-14987] - Compaction marker whose region name doesn't match current region's needs to be handled
- [HBASE-14989] - Implementation of Mutation.getWriteToWAL() is backwards
- [HBASE-14999] - Remove ref to org.mortbay.log.Log
- [HBASE-15000] - Fix javadoc warn in LoadIncrementalHFiles
- [HBASE-15001] - Thread Safety issues in ReplicationSinkManager and HBaseInterClusterReplicationEndpoint
- [HBASE-15009] - Update test-patch.sh on branches; to fix curtailed build report
- [HBASE-15011] - turn off the jdk8 javadoc linter. :(
- [HBASE-15014] - Fix filterCellByStore in WALsplitter is awful for performance

- [HBASE-15015] - Checkstyle plugin shouldn't check Jamon-generated Java classes
- [HBASE-15018] - Inconsistent way of handling TimeoutException in the rpc client implementations
- [HBASE-15019] - Replication stuck when HDFS is restarted
- [HBASE-15021] - hadoopqa doing false positives
- [HBASE-15026] - The default value of "hbase.regions.slop" in hbase-default.xml is obsolete
- [HBASE-15028] - Minor fix on RegionGroupingProvider
- [HBASE-15030] - Deadlock in master TableNameSpaceManager while running IntegrationTestDDLMasterFailover
- [HBASE-15032] - hbase shell scan filter string assumes UTF-8 encoding
- [HBASE-15034] - IntegrationTestDDLMasterFailover does not clean created namespaces
- [HBASE-15035] - bulkloading hfiles with tags that require splits do not preserve tags
- [HBASE-15039] - HMaster and RegionServers should try to refresh token keys from zk when facing InvalidToken
- [HBASE-15057] - local-master-backup.sh doesn't start HMaster correctly
- [HBASE-15058] - AssignmentManager should account for unsuccessful split correctly which initially passes quota check
- [HBASE-15065] - SimpleRegionNormalizer should return multiple normalization plans in one run
- [HBASE-15079] - TestMultiParallel.validateLoadedData AssertionError: null
- [HBASE-15083] - Gets from Multiactions are not counted in metrics for gets.
- [HBASE-15085] - IllegalStateException was thrown when scanning on bulkloaded HFiles
- [HBASE-15093] - Replication can report incorrect size of log queue for the global source when multiwal is enabled
- [HBASE-15098] - Normalizer switch in configuration is not used
- [HBASE-15100] - Master WALProcs still never clean up
- [HBASE-15102] - HeapMemoryTuner can "overtune" memstore size and suddenly drop it into blocking zone
- [HBASE-15122] - Servlets generate XSS_REQUEST_PARAMETER_TO_SERVLET_WRITER findbugs warnings
- [HBASE-15125] - HBaseFsch's adoptHdfsOrphan function creates region with wrong end key boundary
- [HBASE-15128] - Disable region splits and merges switch in master
- [HBASE-15132] - Master region merge RPC should authorize user request
- [HBASE-15133] - Data loss after compaction when a row has more than Integer.MAX_VALUE columns
- [HBASE-15137] - CallTimeoutException and CallQueueTooBigException should trigger PFFE
- [HBASE-15139] - Connection manager doesn't pass client metrics to RpcClient
- [HBASE-15145] - HBCK and Replication should authenticate to zookeeper using server principal
- [HBASE-15146] - Don't block on Reader threads queueing to a scheduler queue
- [HBASE-15147] - Shell should use Admin.listTableNames() instead of Admin.listTables()
- [HBASE-15148] - Resolve IS2_INCONSISTENT_SYNC findbugs warning in AuthenticationTokenSecretManager
- [HBASE-15152] - Automatically include prefix-tree module in MR jobs if present
- [HBASE-15173] - Execute mergeRegions RPC call as the request user
- [HBASE-15190] - Monkey dies when running on shared cluster (gives up when can't kill the other fellows processes)
- [HBASE-15198] - RPC client not using Codec and CellBlock for puts by default
- [HBASE-15200] - ZooKeeper znode ACL checks should only compare the shortname
- [HBASE-15206] - Flakey testSplitDaughtersNotInMeta test
- [HBASE-15209] - disable table in HBaseTestingUtility.truncateTable
- [HBASE-15214] - Valid mutate Ops fail with RPC Codec in use and region moves across
- [HBASE-15216] - Canary does not accept config params from command line
- [HBASE-15218] - On RS crash and replay of WAL, loosing all Tags in Cells
- [HBASE-15221] - HTableMultiplexer improvements (stale region locations and resource leaks)
- [HBASE-15234] - ReplicationLogCleaner can abort due to transient ZK issues
- [HBASE-15247] - InclusiveStopFilter does not respect reverse Filter property
- [HBASE-15252] - Data loss when replaying wal if HDFS timeout
- [HBASE-15279] - OrderedBytes.isEncodedValue does not check for int8 and int16 types
- [HBASE-15283] - Revert to IOException in TimeRange constructor to maintain API compat in 1.x line
- [HBASE-15285] - Forward-port respect for isReturnResult from HBASE-15095
- [HBASE-15287] - mapreduce.RowCounter returns incorrect result with binary row key inputs
- [HBASE-15290] - Hbase Rest CheckAndAPI should save other cells along with compared cell
- [HBASE-15292] - Refined ZooKeeperWatcher to prevent ZooKeeper's callback while construction
- [HBASE-15295] - MutateTableAccess.multiMutate() does not get high priority causing a deadlock
- [HBASE-15297] - error message is wrong when a wrong namespace is specified in grant in hbase shell
- [HBASE-15319] - clearJmxCache does not take effect actually
- [HBASE-15322] - Operations using Unsafe path broken for platforms not having sun.misc.Unsafe
- [HBASE-15323] - Hbase Rest CheckAndDeleteAPI should be able to delete more cells
- [HBASE-15324] - Jitter may cause desiredMaxFileSize overflow in ConstantSizeRegionSplitPolicy and trigger unexpected split
- [HBASE-15325] - ResultScanner allowing partial result will miss the rest of the row if the region is moved between two rpc requests
- [HBASE-15327] - Canary will always invoke admin.balancer() in each sniffing period when writeSniffing is enabled
- [HBASE-15348] - Fix tests broken by recent metrics re-work
- [HBASE-15357] - TableInputFormatBase getSplitKey does not handle signed bytes correctly
- [HBASE-15358] - canEnforceTimeLimitFromScope should use timeScope instead of sizeScope
- [HBASE-15360] - Fix flaky TestSimpleRpcScheduler
- [HBASE-15378] - Scanner cannot handle heartbeat message with no results
- [HBASE-15393] - Enable table replication command will fail when parent znode is not default in peer cluster
- [HBASE-15397] - Create bulk load replication znode(hfile-refs) in ZK replication queue by default
- [HBASE-15405] - Synchronize final results logging single thread in PE, fix wrong defaults in help message
- [HBASE-15406] - Split / merge switch left disabled after early termination of hbck
- [HBASE-15424] - Add bulk load hfile-refs for replication in ZK after the event is appended in the WAL
- [HBASE-15425] - Failing to write bulk load event marker in the WAL is ignored
- [HBASE-15430] - Failed taking snapshot - Manifest proto-message too large

- [HBASE-15433] - SnapshotManager#restoreSnapshot not update table and region count quota correctly when encountering exception
- [HBASE-15439] - getMaximumAllowedTimeBetweenRuns in ScheduledChore ignores the TimeUnit
- [HBASE-15441] - Fix WAL splitting when region has moved multiple times
- [HBASE-15463] - Region normalizer should check whether split/merge is enabled
- [HBASE-15465] - userPermission returned by getUserPermission() for the selected namespace does not have namespace set
- [HBASE-15485] - Filter.reset() should not be called between batches
- [HBASE-15490] - Remove duplicated CompactionThroughputControllerFactory in branch-1
- [HBASE-15504] - Fix Balancer in 1.3 not moving regions off overloaded regionserver
- [HBASE-15515] - Improve LocalityBasedCandidateGenerator in Balancer
- [HBASE-15520] - Fix broken TestAsyncIPC
- [HBASE-15559] - BaseMasterAndRegionObserver doesn't implement all the methods
- [HBASE-15563] - 'counter' may overflow in BoundedGroupingStrategy
- [HBASE-15574] - Minor typo on HRegionServerCommandLine.java
- [HBASE-15578] - Handle HBASE-15234 for ReplicationHFileCleaner
- [HBASE-15582] - SnapshotManifestV1 too verbose when there are no regions
- [HBASE-15587] - FSFileDescriptors.getDescriptor() logs stack trace erroneously
- [HBASE-15591] - ServerCrashProcedure not yielding
- [HBASE-15593] - Time limit of scanning should be offered by client
- [HBASE-15613] - TestNamespaceCommand times out
- [HBASE-15615] - Wrong sleep time when RegionServerCallable need retry
- [HBASE-15617] - Canary in regionserver mode might not enumerate all regionserver
- [HBASE-15621] - Suppress Hbase SnapshotHFile cleaner error messages when a snapshot is going on
- [HBASE-15622] - Superusers does not consider the keytab credentials
- [HBASE-15627] - Miss space and closing quote in AccessController#checkSystemOrSuperUser
- [HBASE-15634] - TestDateTieredCompactionPolicy#negativeForMajor is flaky
- [HBASE-15636] - hard coded wait time out value in HBaseTestingUtility#waitUntilAllRegionsAssigned might cause test failure
- [HBASE-15637] - TSHA Thrift-2 server should allow limiting call queue size
- [HBASE-15639] - Unguarded access to stackIndexes in Procedure#toStringDetails()
- [HBASE-15645] - hbase.rpc.timeout is not used in operations of HTable
- [HBASE-15650] - Remove TimeRangeTracker as point of contention when many threads reading a StoreFile
- [HBASE-15664] - Use Long.MAX_VALUE instead of HConstants.FOREVER in CompactionPolicy
- [HBASE-15668] - HFileReplicator\$Copier fails to replicate other hfiles in the request when a hfile is not found in FS anywhere
- [HBASE-15669] - HFile size is not considered correctly in a replication request
- [HBASE-15670] - Add missing Snapshot.proto to the maven profile for compiling protobuf
- [HBASE-15672] - hadoop.hbase.security.visibility.TestVisibilityLabelsWithDeletes fails
- [HBASE-15673] - [PE tool] Fix latency metrics for multiGet
- [HBASE-15674] - HRegionLocator#getAllRegionLocations should put the results in cache
- [HBASE-15676] - FuzzyRowFilter fails and matches all the rows in the table if the mask consists of all 0s
- [HBASE-15693] - Reconsider the ImportOrder rule of checkstyle
- [HBASE-15697] - Excessive TestHRegion running time on branch-1
- [HBASE-15698] - Increment TimeRange not serialized to server
- [HBASE-15703] - Deadline scheduler needs to return to the client info about skipped calls, not just drop them
- [HBASE-15707] - ImportTSV bulk output does not support tags with hfile.format.version=3
- [HBASE-15710] - Include issue servers information in RetriesExhaustedException message
- [HBASE-15714] - We are calling checkRow() twice in doMiniBatchMutation()
- [HBASE-15738] - Ensure artifacts in project dist area include required md5 file
- [HBASE-15741] - Provide backward compatibility for HBase coprocessor service names
- [HBASE-15742] - Reduce allocation of objects in metrics
- [HBASE-15746] - Remove extra RegionCoproprocessor preClose() in RSRpcServices#closeRegion
- [HBASE-15752] - ClassNotFoundException is encountered when custom WAL codec is not found in WALPlayer job
- [HBASE-15755] - SnapshotDescriptionUtils and SnapshotTestingUtils do not have any Interface audience marked
- [HBASE-15775] - Canary launches two AuthUtil Chores
- [HBASE-15801] - Upgrade checkstyle for all branches
- [HBASE-15811] - Batch Get after batch Put does not fetch all Cells
- [HBASE-15824] - LocalHBaseCluster gets bind exception in master info port
- [HBASE-15840] - WAL.proto compilation broken for cpp
- [HBASE-15841] - Performance Evaluation tool total rows may not be set correctly
- [HBASE-15850] - Localize the configuration change in testCheckTableLocks to reduce flakiness of TestHBaseFsck test suite
- [HBASE-15856] - Cached Connection instances can wind up with addresses never resolved
- [HBASE-15873] - ACL for snapshot restore / clone is not enforced
- [HBASE-15876] - Remove doBulkLoad(Path hfilePath, final HTable table) though it has not been through a full deprecation cycle
- [HBASE-15880] - RpcClientImpl#tracedWriteRequest incorrectly closes HTrace span
- [HBASE-15884] - NPE in StoreFileScanner#skipKVsWithNewerThanReadpoint during reverse scan
- [HBASE-15908] - Checksum verification is broken due to incorrect passing of ByteBuffers in DataChecksum
- [HBASE-15913] - Sasl encryption doesn't work with AsyncRpcChannel
- [HBASE-15920] - Backport submit-patch.py to branch-1 and earlier branches.
- [HBASE-15925] - compat-module maven variable not evaluated
- [HBASE-15946] - Eliminate possible security concerns in RS web UI's store file metrics
- [HBASE-15952] - Bulk load data replication is not working when RS user does not have permission on hfile-refs node
- [HBASE-15954] - REST server should log requests with TRACE instead of DEBUG
- [HBASE-15955] - Disable action in CatalogJanitor#setEnabled should wait for active cleanup scan to finish
- [HBASE-15957] - RpcClientImpl.close never ends in some circumstances

- [HBASE-15975] - logic in TestHTableDescriptor#testAddCoproprocessorWithSpecStr is wrong
- [HBASE-15976] - RegionServerMetricsWrapperRunnable will be failure when disable blockcache.
- [HBASE-16007] - Job's Configuration should be passed to TableMapReduceUtil#addDependencyJars() in WALPlayer
- [HBASE-16012] - Major compaction can't work due to obsolete scanner read point in RegionServer
- [HBASE-16016] - AssignmentManager#waitForAssignment could have unexpected negative deadline
- [HBASE-16017] - HBase TableOutputFormat has connection leak in getRecordWriter
- [HBASE-16024] - Revert HBASE-15406 from branch-1.3
- [HBASE-16032] - Possible memory leak in StoreScanner
- [HBASE-16047] - TestFastFail is broken again
- [HBASE-16061] - Allow logging to a buffered console
- [HBASE-16062] - Improper error handling in WAL Reader/Writer creation
- [HBASE-16074] - ITBLL fails, reports lost big or tiny families
- [HBASE-16081] - Replication remove_peer gets stuck and blocks WAL rolling
- [HBASE-16093] - Splits failed before creating daughter regions leave meta inconsistent
- [HBASE-16095] - Add priority to TableDescriptor and priority region open thread pool
- [HBASE-16096] - Replication keeps accumulating znodes
- [HBASE-16129] - check_compatibility.sh is broken when using Java API Compliance Checker v1.7
- [HBASE-16132] - Scan does not return all the result when regionserver is busy
- [HBASE-16135] - PeerClusterZnode under rs of removed peer may never be deleted
- [HBASE-16144] - Replication queue's lock will live forever if RS acquiring the lock has died prematurely
- [HBASE-16150] - Remove ConcurrentIndex
- [HBASE-16160] - Get the UnsupportedOperationException when using delegation token with encryption
- [HBASE-16165] - Decrease RpcServer.callQueueSize before writeResponse causes OOM
- [HBASE-16177] - In dev mode thrift server can't be run
- [HBASE-16190] - IntegrationTestDDLMasterFailover failed with IllegalArgumentException: n must be positive
- [HBASE-16201] - NPE in RpcServer causing intermittent UT failure of TestMasterReplication#testHFileCyclicReplication
- [HBASE-16207] - can't restore snapshot without "Admin" permission
- [HBASE-16211] - JMXCacheBuster restarting the metrics system might cause tests to hang
- [HBASE-16221] - Thrift server drops connection on long scans
- [HBASE-16227] - [Shell] Column value formatter not working in scans
- [HBASE-16237] - Blocks for hbase:meta table are not cached in L1 cache
- [HBASE-16238] - It's useless to catch SESSIONEXPIRED exception and retry in RecoverableZooKeeper
- [HBASE-16270] - Handle duplicate clearing of snapshot in region replicas
- [HBASE-16271] - Fix logging and re-run the test in IntegrationTestBulkLoad
- [HBASE-16272] - Overflow in ServerName's compareTo method
- [HBASE-16281] - TestMasterReplication is flaky
- [HBASE-16284] - Unauthorized client can shutdown the cluster
- [HBASE-16288] - HFile intermediate block level indexes might recurse forever creating multi TB files
- [HBASE-16289] - AsyncProcess stuck messages need to print region/server
- [HBASE-16294] - hbck reporting "No HDFS region dir found" for replicas
- [HBASE-16296] - Reverse scan performance degrades when using filter lists
- [HBASE-16300] - LruBlockCache.CACHE_FIXED_OVERHEAD should calculate LruBlockCache size correctly
- [HBASE-16301] - Trigger flush without waiting when compaction is disabled on a table
- [HBASE-16303] - FilterList with MUST_PASS_ONE optimization
- [HBASE-16304] - HRegion#RegionScannerImpl#handleFileNotFoundException may lead to deadlock when trying to obtain write lock on updatesLock
- [HBASE-16315] - RegionSizeCalculator prints region names as binary without escapes
- [HBASE-16319] - Fix TestCacheOnWrite after HBASE-16288
- [HBASE-16341] - Missing bit on "Regression: Random Read/WorkloadC slower in 1.x than 0.98"
- [HBASE-16350] - Undo server abort from HBASE-14968
- [HBASE-16355] - hbase-client dependency on hbase-common test-jar should be test scope
- [HBASE-16360] - TableMapReduceUtil addHBaseDependencyJars has the wrong class name for PrefixTreeCodec
- [HBASE-16363] - Correct javadoc for qualifier length and value length in Cell interface
- [HBASE-16368] - test*WhenRegionMove in TestPartialResultsFromClientSide is flaky
- [HBASE-16373] - precommit needs a dockerfile with hbase prereqs
- [HBASE-16375] - Mapreduce mini cluster using HBaseTestingUtility not setting correct resource manager and job history webapp address of MapReduceTestingShim
- [HBASE-16429] - FSHLog: deadlock if rollWriter called when ring buffer filled with appends
- [HBASE-16460] - Can't rebuild the BucketAllocator's data structures when BucketCache uses FileIOEngine
- [HBASE-16464] - archive folder grows bigger and bigger due to corrupt snapshot under tmp dir
- [HBASE-16471] - Region Server metrics context will be wrong when machine hostname contain "master" word
- [HBASE-16527] - IOExceptions from DFS client still can cause CatalogJanitor to delete referenced files
- [HBASE-16528] - Procedure-V2: ServerCrashProcedure misses owner information
- [HBASE-16535] - Use regex to exclude generated classes for findbugs
- [HBASE-16547] - hbase-archetype-builder shell scripts assume bash is installed in /bin
- [HBASE-16552] - MiniHBaseCluster#getServerWith() does not ignore stopped RSs
- [HBASE-16589] - Adjust log level for FATAL messages from HBaseReplicationEndpoint that are not fatal
- [HBASE-16604] - Scanner retries on IOException can cause the scans to miss data
- [HBASE-16613] - Return the unused ByteBuffer to BoundedByteBufferPool when no cell is retrieved from the CellScanner
- [HBASE-16644] - Errors when reading legit HFile Trailer of old (v2.0) format file
- [HBASE-16649] - Truncate table with splits preserved can cause both data loss and truncated data appeared again
- [HBASE-16660] - ArrayIndexOutOfBoundsException during the majorCompactionCheck in DateTieredCompaction

- [HBASE-16662] - Fix open POODLE vulnerabilities
- [HBASE-16663] - JMX ConnectorServer stopped when unauthorized user try to stop HM/RS/cluster
- [HBASE-16664] - Timeout logic in AsyncProcess is broken
- [HBASE-16678] - MapReduce jobs do not update counters from ScanMetrics
- [HBASE-16679] - Flush throughput controller: Minor perf change and fix flaky TestFlushWithThroughputController
- [HBASE-16681] - Fix flaky TestReplicationSourceManagerZkImpl
- [HBASE-16682] - Fix Shell tests failure. NoClassDefFoundError for MiniKdc
- [HBASE-16699] - Overflows in AverageIntervalRateLimiter's refill() and getWaitInterval()
- [HBASE-16701] - TestHRegion and TestHRegionWithInMemoryFlush timing out
- [HBASE-16721] - Concurrency issue in WAL unflushed seqld tracking
- [HBASE-16723] - RMI registry is not destroyed after stopping JMX Connector Server
- [HBASE-16732] - Avoid possible NPE in MetaTableLocator
- [HBASE-16743] - TestSimpleRpcScheduler#testCoDelScheduling is broke
- [HBASE-16752] - Upgrading from 1.2 to 1.3 can lead to replication failures due to difference in RPC size limit
- [HBASE-16754] - Regions failing compaction due to referencing non-existent store file
- [HBASE-16765] - New SteppingRegionSplitPolicy, avoid too aggressive spread of regions for small tables.
- [HBASE-16788] - Race in compacted file deletion between HStore close() and closeAndArchiveCompactedFiles()
- [HBASE-16807] - RegionServer will fail to report new active Hmaster until HMaster/RegionServer failover
- [HBASE-16810] - HBase Balancer throws ArrayIndexOutOfBoundsException when regionserver are in /hbase/draining znode and unloaded
- [HBASE-16824] - Writer.flush() can be called on already closed streams in WAL roll
- [HBASE-16830] - RSRpcServices#openRegion() should handle the case where table descriptor is null
- [HBASE-16852] - TestDefaultCompactSelection failed on branch-1.3
- [HBASE-16853] - Regions are assigned to Region Servers in /hbase/draining after HBase Master failover
- [HBASE-16889] - Proc-V2: verifyTables in the IntegrationTestDDLMasterFailover test after each table DDL is incorrect
- [HBASE-16931] - Setting cell's seqld to zero in compaction flow might cause RS down.
- [HBASE-16960] - RegionServer hang when aborting
- [HBASE-16964] - Successfully archived files are not cleared from compacted store file list if archiving of any file fails
- [HBASE-16980] - TestRowProcessorEndpoint failing consistently
- [HBASE-17023] - Region left unassigned due to AM and SSH each thinking others would do the assignment work
- [HBASE-17032] - CallQueueTooBigException and CallDroppedException should not be triggering PFEE
- [HBASE-17042] - Remove 'public' keyword from MasterObserver interface
- [HBASE-17044] - Fix merge failed before creating merged region leaves meta inconsistent
- [HBASE-17058] - Lower epsilon used for jitter verification from HBASE-15324
- [HBASE-17074] - PreCommit job always fails because of OOM
- [HBASE-17091] - IntegrationTestZKAndFSPPermissions failed with 'KeeperException\$NoNodeException'
- [HBASE-17224] - There are lots of spelling errors in the HBase logging and exception messages
- [HBASE-17238] - Wrong in-memory hbase:meta location causing SSH failure
- [HBASE-17328] - Properly dispose of looped replication peers
- [HBASE-17341] - Add a timeout during replication endpoint termination
- [HBASE-17424] - Protect REST client against malicious XML responses.

Improvement

- [HBASE-6617] - ReplicationSourceManager should be able to track multiple WAL paths
- [HBASE-7171] - Initial web UI for region/memstore/storefiles details
- [HBASE-7972] - Add a configuration for the TCP backlog in the Thrift server
- [HBASE-8386] - deprecate TableMapReduce.addDependencyJars(Configuration, class<?> ...)
- [HBASE-8642] - [Snapshot] List and delete snapshot by table
- [HBASE-9899] - for idempotent operation dups, return the result instead of throwing conflict exception
- [HBASE-12596] - bulkload needs to follow locality
- [HBASE-12769] - Replication fails to delete all corresponding zk nodes when peer is removed
- [HBASE-12940] - Expose listPeerConfigs and getPeerConfig to the HBase shell
- [HBASE-12986] - Compaction pressure based client pushback
- [HBASE-12988] - [Replication]Parallel apply edits across regions
- [HBASE-13103] - [ergonomics] add region size balancing as a feature of master
- [HBASE-13127] - Add timeouts on all tests so less zombie sightings
- [HBASE-13158] - When client supports CellBlock, return the result Cells as controller payload for get(Get) API also
- [HBASE-13347] - Deprecate FirstKeyValueMatchingQualifiersFilter
- [HBASE-13376] - Improvements to Stochastic load balancer
- [HBASE-13532] - Make UnknownScannerException logging less scary
- [HBASE-13876] - Improving performance of HeapMemoryManager
- [HBASE-13925] - Use zookeeper multi to clear znodes in ZKProcedureUtil
- [HBASE-13965] - Stochastic Load Balancer JMX Metrics
- [HBASE-13980] - Distinguish blockedFlushCount vs unblockedFlushCount when tuning heap memory
- [HBASE-13985] - Add configuration to skip validating HFile format when bulk loading
- [HBASE-13996] - Add write sniffing in canary
- [HBASE-14002] - Add --noReplicationSetup option to IntegrationTestReplication
- [HBASE-14015] - Allow setting a richer state value when toString a pv2
- [HBASE-14045] - Bumping thrift version to 0.9.2.
- [HBASE-14058] - Stabilizing default heap memory tuner

- [HBASE-14078] - improve error message when HMaster can't bind to port
- [HBASE-14082] - Add replica id to JMX metrics names
- [HBASE-14097] - Log link to client scan troubleshooting section when scanner exceptions happen.
- [HBASE-14110] - Add CostFunction for balancing primary region replicas
- [HBASE-14122] - Client API for determining if server side supports cell level security
- [HBASE-14148] - Web UI Framable Page
- [HBASE-14164] - Display primary region replicas distribution on table.jsp
- [HBASE-14165] - The initial size of RWQueueRpcExecutor.queues should be (numWriteQueues + numReadQueues + numScanQueues)
- [HBASE-14172] - Upgrade existing thrift binding using thrift 0.9.3 compiler.
- [HBASE-14194] - Undeprecate methods in ThriftServerRunner.HBaseHandler
- [HBASE-14203] - remove duplicate code getTableDescriptor in HTable
- [HBASE-14230] - replace reflection in FSHlog with HdfsDataOutputStream#getCurrentBlockReplication()
- [HBASE-14260] - don't build javadocs for hbase-protocol module
- [HBASE-14261] - Enhance Chaos Monkey framework by adding zookeeper and datanode fault injections.
- [HBASE-14266] - RegionServers have a lock contention of Configuration.getProps
- [HBASE-14268] - Improve KeyLocker
- [HBASE-14306] - Refine RegionGroupingProvider: fix issues and make it more scalable
- [HBASE-14309] - Allow load balancer to operate when there is region in transition by adding force flag
- [HBASE-14314] - Metrics for block cache should take region replicas into account
- [HBASE-14345] - Consolidate printUsage in IntegrationTestLoadAndVerify
- [HBASE-14387] - Compaction improvements: Maximum off-peak compaction size
- [HBASE-14397] - PrefixFilter doesn't filter all remaining rows if the prefix is longer than rowkey being compared
- [HBASE-14436] - HTableDescriptor#addCoproprocessor will always make RegionCoproprocessorHost create new Configuration
- [HBASE-14448] - Refine RegionGroupingProvider Phase-2: remove provider nesting and formalize wal group name
- [HBASE-14468] - Compaction improvements: FIFO compaction policy
- [HBASE-14517] - Show regionserver's version in master status page
- [HBASE-14565] - Make ZK connection timeout configurable in MiniZooKeeperCluster
- [HBASE-14580] - Make the HBaseMiniCluster compliant with Kerberos
- [HBASE-14582] - Regionserver status webpage bucketcache list can become huge
- [HBASE-14586] - Use a maven profile to run Jacoco analysis
- [HBASE-14587] - Attach a test-sources.jar for hbase-server
- [HBASE-14588] - Stop accessing test resources from within src folder
- [HBASE-14643] - Avoid Splits from once again opening a closed reader for fetching the first and last key
- [HBASE-14683] - Batching in buffered mutator is awful when adding lists of mutations.
- [HBASE-14684] - Try to remove all MiniMapReduceCluster in unit tests
- [HBASE-14687] - Un-synchronize BufferedMutator
- [HBASE-14693] - Add client-side metrics for received pushback signals
- [HBASE-14696] - Support setting allowPartialResults in mapreduce Mappers
- [HBASE-14703] - HTable.mutateRow does not collect stats
- [HBASE-14708] - Use copy on write Map for region location cache
- [HBASE-14715] - Add javadocs to DelegatingRetryingCallable
- [HBASE-14719] - Add metric for number of MasterProcWALs
- [HBASE-14721] - Memstore add cells - Avoid many garbage
- [HBASE-14730] - region server needs to log warnings when there are attributes configured for cells with hfile v2
- [HBASE-14752] - Add example of using the HBase client in a multi-threaded environment
- [HBASE-14765] - Remove snappy profile
- [HBASE-14800] - Expose checkAndMutate via Thrift2
- [HBASE-14805] - status should show the master in shell
- [HBASE-14821] - CopyTable should allow overriding more config properties for peer cluster
- [HBASE-14862] - Add support for reporting p90 for histogram metrics
- [HBASE-14866] - VerifyReplication should use peer configuration in peer connection
- [HBASE-14891] - Add log for uncaught exception in RegionServerMetricsWrapperRunnable
- [HBASE-14946] - Don't allow multi's to over run the max result size.
- [HBASE-14951] - Make hbase.regionserver.maxlogs obsolete
- [HBASE-14963] - Remove use of Guava Stopwatch from HBase client code
- [HBASE-14969] - Add throughput controller for flush
- [HBASE-14976] - Add RPC call queues to the web ui
- [HBASE-14978] - Don't allow Multi to retain too many blocks
- [HBASE-14983] - Create metrics for per block type hit/miss ratios
- [HBASE-14984] - Allow memcached block cache to set optimize to false
- [HBASE-15005] - Use value array in computing block length for 1.2 and 1.3
- [HBASE-15038] - ExportSnapshot should support separate configurations for source and destination clusters
- [HBASE-15066] - Small improvements to Canary tool
- [HBASE-15068] - Add metrics for region normalization plans
- [HBASE-15076] - Add getScanner(Scan scan, List<KeyValueScanner> additionalScanners) API into Region interface
- [HBASE-15111] - "hbase version" should write to stdout
- [HBASE-15119] - Include git SHA in check_compatibility reports
- [HBASE-15123] - Remove duplicate code in LocalHBaseCluster and minor formatting
- [HBASE-15129] - Set default value for hbase.fs.tmp.dir rather than fully depend on hbase-default.xml
- [HBASE-15177] - Reduce garbage created under high load
- [HBASE-15211] - Don't run the CatalogJanitor if there are regions in transition
- [HBASE-15212] - RRCServer should enforce max request size

- [HBASE-15219] - Canary tool does not return non-zero exit code when one of regions is in stuck state
- [HBASE-15222] - Use less contended classes for metrics
- [HBASE-15223] - Make convertScanToString public for Spark
- [HBASE-15229] - Canary Tools should not call System.Exit on error
- [HBASE-15306] - Make RPC call queue length dynamically configurable
- [HBASE-15315] - Remove always set super user call as high priority
- [HBASE-15339] - Improve DateTieredCompactionPolicy
- [HBASE-15353] - Add metric for number of CallQueueTooBigException's
- [HBASE-15396] - Enhance mapreduce.TableSplit to add encoded region name
- [HBASE-15413] - Procedure-V2: print out ProcedureInfo during trace
- [HBASE-15415] - Improve Master WebUI snapshot information
- [HBASE-15456] - CreateTableProcedure/ModifyTableProcedure needs to fail when there is no family in table descriptor
- [HBASE-15470] - Add a setting for Priority queue length
- [HBASE-15471] - Add num calls in priority and general queue to RS UI
- [HBASE-15475] - Allow TimestampsFilter to provide a seek hint
- [HBASE-15478] - add comments to FSHLog explaining why syncRunnerIndex won't overflow
- [HBASE-15508] - Add command for exporting snapshot in hbase command script
- [HBASE-15526] - Make SnapshotManager accessible through MasterServices
- [HBASE-15551] - Make call queue too big exception use servername
- [HBASE-15569] - Make Bytes.toStringBinary faster
- [HBASE-15586] - Unify human readable numbers in the web UI
- [HBASE-15600] - Add provision for adding mutations to memstore or able to write to same region in batchMutate coprocessor hooks
- [HBASE-15605] - Remove PB references from HCD and HTD for 2.0
- [HBASE-15607] - Remove PB references from Admin for 2.0
- [HBASE-15608] - Remove PB references from SnapShot related Exceptions
- [HBASE-15609] - Remove PB references from Result, DoubleColumnInterpreter and any such public facing class for 2.0
- [HBASE-15632] - Undo the checking of lastStoreFlushTimeMap.isEmpty() introduced in HBASE-13145
- [HBASE-15641] - Shell "alter" should do a single modifyTable operation
- [HBASE-15720] - Print row locks at the debug dump page
- [HBASE-15773] - CellCounter improvements
- [HBASE-15791] - Improve javadoc in ScheduledChore
- [HBASE-15808] - Reduce potential bulk load intermediate space usage and waste
- [HBASE-15837] - Memstore size accounting is wrong if postBatchMutate() throws exception
- [HBASE-15854] - Log the cause of SASL connection failures
- [HBASE-15864] - Reuse the testing helper to wait regions in transition
- [HBASE-15870] - Specify columns in REST multi gets
- [HBASE-15890] - Allow thrift to set/unset "cacheBlocks" for Scans
- [HBASE-15931] - Add log for long-running tasks in AsyncProcess
- [HBASE-16026] - Master UI should display status of additional ZK switches
- [HBASE-16033] - Add more details in logging of responseTooSlow/TooLarge
- [HBASE-16048] - Tag InternalScanner with LimitedPrivate(HBaseInterfaceAudience.COPROC)
- [HBASE-16085] - Add on metric for failed compactions
- [HBASE-16086] - TableCfWALEntryFilter and ScopeWALEntryFilter should not redundantly iterate over cells.
- [HBASE-16087] - Replication shouldn't start on a master if if only hosts system tables
- [HBASE-16089] - Add on FastPath for CoDel
- [HBASE-16124] - Make check_compatibility.sh less verbose when building HBase
- [HBASE-16140] - bump owasp.esapi from 2.1.0 to 2.1.0.1
- [HBASE-16149] - Log the underlying RPC exception in RpcRetryingCallerImpl
- [HBASE-16231] - Integration tests should support client keytab login for secure clusters
- [HBASE-16241] - Allow specification of annotations to use when running check_compatibility.sh
- [HBASE-16256] - Purpose of EnvironmentEdge, EnvironmentEdgeManager
- [HBASE-16266] - Do not throw ScannerTimeoutException when catch UnknownScannerException
- [HBASE-16287] - LruBlockCache size should not exceed acceptableSize too many
- [HBASE-16379] - [replication] Minor improvement to replication/copy_tables_desc.rb
- [HBASE-16385] - Have hbase-rest pull hbase.rest.port from Constants.java
- [HBASE-16450] - Shell tool to dump replication queues
- [HBASE-16486] - Unify system table creation using the same createSystemTable API.
- [HBASE-16657] - Expose per-region last major compaction timestamp in RegionServer UI
- [HBASE-16661] - Add last major compaction age to per-region metrics
- [HBASE-16667] - Building with JDK 8: ignoring option MaxPermSize=256m
- [HBASE-16972] - Log more details for Scan#next request when responseTooSlow
- [HBASE-17004] - Refactor IntegrationTestManyRegions to use @ClassRule for timing out
- [HBASE-17006] - Add names to threads for better debugability of thread dumps

New Feature

- [HBASE-10358] - Shell changes for setting consistency per request
- [HBASE-11262] - Avoid empty columns while doing bulk-load
- [HBASE-12133] - Add FastLongHistogram for metric computation
- [HBASE-12911] - Client-side metrics
- [HBASE-13153] - Bulk Loaded HFile Replication

- [HBASE-13702] - ImportTsv: Add dry-run functionality and log bad rows
- [HBASE-14154] - DFS Replication should be configurable at column family level
- [HBASE-14456] - Implement a namespace-based region grouping strategy for RegionGroupingProvider
- [HBASE-14459] - Add request and response sizes metrics
- [HBASE-14529] - Respond to SIGHUP to reload config
- [HBASE-15135] - Add metrics for storefile age
- [HBASE-15136] - Explore different queuing behaviors while busy
- [HBASE-15181] - A simple implementation of date based tiered compaction
- [HBASE-15281] - Allow the FileSystem inside HFileSystem to be wrapped
- [HBASE-15481] - Add pre/post roll to WALObserver
- [HBASE-15592] - Print Procedure WAL content
- [HBASE-15780] - Expose AuthUtil as IA.Public
- [HBASE-15881] - Allow BZIP2 compression

Task

- [HBASE-11276] - Add back support for running ChaosMonkey as standalone tool
- [HBASE-13089] - Fix test compilation error on building against htrace-3.2.0-incubating
- [HBASE-13666] - book.pdf is not renamed during site build
- [HBASE-13929] - make_rc.sh publishes empty shaded artifacts
- [HBASE-13964] - Skip region normalization for tables under namespace quota
- [HBASE-14052] - Mark a few methods in CellUtil audience private since only make sense internally to hbase
- [HBASE-14053] - Disable DLR in branch-1+
- [HBASE-14057] - HBase shell user_permission should list super users defined on hbase-site.xml
- [HBASE-14066] - clean out old docbook docs from branch-1
- [HBASE-14288] - Upgrade asciidoctor plugin to v1.5.2.1
- [HBASE-14290] - Spin up less threads in tests
- [HBASE-14308] - HTableDescriptor WARN is not actionable
- [HBASE-14318] - make_rc.sh should purge/re-resolve dependencies from local repository
- [HBASE-14361] - ReplicationSink should create Connection instances lazily
- [HBASE-14493] - Upgrade the jamon-runtime dependency
- [HBASE-14502] - Purge use of jmock and remove as dependency
- [HBASE-14516] - categorize hadoop-compat tests
- [HBASE-14526] - Remove delayed rpc
- [HBASE-14678] - Experiment: Temporarily disable balancer and a few others to see if root of crashed/timedout JVMs
- [HBASE-14851] - Add test showing how to use TTL from thrift
- [HBASE-15003] - Remove BoundedConcurrentLinkedQueue and associated test
- [HBASE-15099] - Move RegionStateListener class out of quotas package
- [HBASE-15220] - Change two logs in SimpleRegionNormalizer to INFO level
- [HBASE-15729] - Remove old JDiff wrapper scripts in dev-support
- [HBASE-15888] - Extend HBASE-12769 for bulk load data replication
- [HBASE-15895] - remove unmaintained jenkins build analysis tool.
- [HBASE-16073] - update compatibility_checker for jacc dropping comma sep args
- [HBASE-16154] - bring non-master branches up to date wrt check_compatibility script
- [HBASE-16260] - Audit dependencies for Category-X
- [HBASE-16340] - ensure no Xerces jars included
- [HBASE-16376] - Document implicit side-effects on partial results when calling Scan#setBatch(int)
- [HBASE-16467] - Move AbstractHBaseTool to hbase-common
- [HBASE-16518] - Remove old .arcconfig file
- [HBASE-16710] - Add ZStandard Codec to Compression.java

Test

- [HBASE-13372] - Unit tests for SplitTransaction and RegionMergeTransaction listeners
- [HBASE-13590] - TestEnableTableHandler.testEnableTableWithNoRegionServers is flakey
- [HBASE-14197] - TestRegionServerHostname#testInvalidRegionServerHostnameAbortsServer fails in Jenkins
- [HBASE-14200] - Separate RegionReplica subtests of TestStochasticLoadBalancer into TestStochasticLoadBalancer2
- [HBASE-14210] - Create test for cell level ACLs involving user group
- [HBASE-14277] - TestRegionServerHostname.testRegionServerHostname may fail at host with a case sensitive name
- [HBASE-14293] - TestStochasticBalancerJmxMetrics intermittently fails due to port conflict
- [HBASE-14584] - TestNamespacesInstanceModel fails on jdk8
- [HBASE-14758] - Add UT case for unchecked error/exception thrown in AsyncProcess#sendMultiAction
- [HBASE-14839] - [branch-1] Backport test categories so that patch backport is easier
- [HBASE-15679] - Assertion on wrong variable in TestReplicationThrottler#testThrottling
- [HBASE-15923] - Shell rows counter test fails
- [HBASE-16049] - TestRowProcessorEndpoint is failing on Apache Builds
- [HBASE-16051] - TestScannerHeartbeatMessages fails on some machines

Umbrella

- [\[HBASE-14420\]](#) - Zombie Stomping Session
- [\[HBASE-14457\]](#) - Umbrella: Improve Multiple WAL for production usage
- [\[HBASE-15341\]](#) - 1.3 release umbrella

Edit/Copy Release Notes

The text area below allows the project release notes to be edited and copied to another document.

Release Notes - HBase - Version 1.3.0	
<h2> Sub-task	
</h2>	
	
[HBASE-12748] - creates too many iterator objects	RegionCoprocessorHost.execOperation
	
[HBASE-13212] - namespace	Procedure V2 - master Create/Modify/Delete
	
[HBASE-13415] - from client	Procedure V2 - Use nonces for double submits
	
[HBASE-13470] - operations	High level Integration test for master DDL
	
[HBASE-13819] - DirectByteBuffer	Make RPC layer CellBlock buffer a
	
[HBASE-13832] - WALProcedureStore sync failures when HDFS data nodes count is low	Procedure V2: master fail to start due to
	
[HBASE-13909] -	create 1.2 branch
	
[HBASE-13920] - from javadoc	Exclude Java files generated from protobuf
	
[HBASE-13963] -	avoid leaking jdk.tools
	
[HBASE-13967] -	add jdk profiles for jdk.tools dependency
	
[HBASE-13973] - changes	Update documentation for 10070 Phase 2
	
[HBASE-13990] -	clean up remaining errors for maven site goal
	
[HBASE-14003] -	work around jdk8 spec bug in WALPerfEval
	