Sub-task

- [HBASE-15386] PREFETCH_BLOCKS_ON_OPEN in HColumnDescriptor is ignored
- [HBASE-17060] backport HBASE-16570 to 1.3.1
- [HBASE-17561] table status page should escape values that may contain arbitrary characters.

Bug

- [HBASE-14753] TestShell is not invoked anymore
- [HBASE-15328] Unvalidated Redirect in HMaster
- [HBASE-15635] Mean age of Blocks in cache (seconds) on webUI should be greater than zero
- [HBASE-16630] Fragmentation in long running Bucket Cache
- [HBASE-16886] hbase-client: scanner with reversed=true and small=true gets no result
- [HBASE-16939] ExportSnapshot: set owner and permission on right directory
- [HBASE-16948] Fix inconsistency between HRegion and Region javadoc on getRowLock
- [HBASE-17059] backport HBASE-17039 to 1.3.1
- [HBASE-17069] RegionServer writes invalid META entries for split daughters in some circumstances
- [HBASE-17070] backport HBASE-17020 to 1.3.1
- [HBASE-17112] Prevent setting timestamp of delta operations the same as previous value's
- [HBASE-17175] backport HBASE-17127 to 1.3.1
- [HBASE-17187] DoNotRetryExceptions from coprocessors should bubble up to the application
- [HBASE-17227] Backport HBASE-17206 to branch-1.3
- [HBASE-17264] Processing RIT with offline state will always fail to open the first time
- [HBASE-17265] Region left unassigned in master failover when region failed to open
- [HBASE-17275] Assign timeout may cause region to be unassigned forever
- [HBASE-17287] Master becomes a zombie if filesystem object closes
- [HBASE-17289] Avoid adding a replication peer named "lock"
- [HBASE-17357] PerformanceEvaluation parameters parsing triggers NPE.
- [HBASE-17381] ReplicationSourceWorkerThread can die due to unhandled exceptions
- [HBASE-17387] Reduce the overhead of exception report in RegionActionResult for multi()
- [HBASE-17445] Count size of serialized exceptions in checking max result size quota
- [HBASE-17475] Stack overflow in AsyncProcess if retry too much
- [HBASE-17489] ClientScanner may send a next request to a RegionScanner which has been exhausted
- [HBASE-17501] NullPointerException after Datanodes Decommissioned and Terminated
- [HBASE-17522] RuntimeExceptions from MemoryMXBean should not take down server process
- [HBASE-17540] Change SASL server GSSAPI callback log line from DEBUG to TRACE in RegionServer to reduce log volumes in DEBUG mode
- [HBASE-17558] ZK dumping jsp should escape html
- [HBASE-17572] HMaster: Caught throwable while processing event C_M_MERGE_REGION
- [HBASE-17578] Thrift per-method metrics should still update in the case of exceptions
- [HBASE-17587] Do not Rethrow DoNotRetryIOException as UnknownScannerException
- [HBASE-17590] Drop cache hint should work for StoreFile write path
- [HBASE-17597] TestMetaWithReplicas.testMetaTableReplicaAssignment is flaky
- [HBASE-17601] close() in TableRecordReaderImpl assumes the split has started
- [HBASE-17604] Backport HBASE-15437 (fix request and response size metrics) to branch-1
- [HBASE-17611] Thrift 2 per-call latency metrics are capped at ~ 2 seconds
- [HBASE-17616] Incorrect actions performed by CM
- [HBASE-17649] REST API for scan should return 410 when table is disabled
- [HBASE-17675] ReplicationEndpoint should choose new sinks if a SaslException occurs
- [HBASE-17677] ServerName parsing from directory name should be more robust to errors from guava's HostAndPort
- [HBASE-17682] Region stuck in merging new state indefinitely
- [HBASE-17688] MultiRowRangeFilter not working correctly if given same start and stop RowKey
- [HBASE-17698] ReplicationEndpoint choosing sinks
- [HBASE-17716] Formalize Scan Metric names
- [HBASE-17717] Incorrect ZK ACL set for HBase superuser
- [HBASE-17722] Metrics subsystem stop/start messages add a lot of useless bulk to operational logging
- [HBASE-17780] BoundedByteBufferPool "At capacity" messages are not actionable
- [HBASE-17813] backport HBASE-16983 to branch-1.3
- [HBASE-17868] Backport HBASE-10205 to branch-1.3
- [HBASE-17886] Fix compatibility of ServerSideScanMetrics

Improvement

- [HBASE-12770] Don't transfer all the queued hlogs of a dead server to the same alive server
- [HBASE-15429] Add a split policy for busy regions
- [HBASE-15941] HBCK repair should not unsplit healthy splitted region
- [HBASE-16562] ITBLL should fail to start if misconfigured

- [HBASE-16755] Honor flush policy under global memstore pressure
- [HBASE-16773] AccessController should access local region if possible
- [HBASE-16947] Some improvements for DumpReplicationQueues tool
- [HBASE-16977] VerifyReplication should log a printable representation of the row keys
- [HBASE-17057] Minor compactions should also drop page cache behind reads
- [HBASE-17579] Backport HBASE-16302 to 1.3.1
- [HBASE-17627] Active workers metric for thrift
- [HBASE-17637] Update progress more frequently in IntegrationTestBigLinkedList.Generator.persist
- [HBASE-17837] Backport HBASE-15314 to branch-1.3

Task

• [HBASE-17609] - Allow for region merging in the UI

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 1.3.1
<h2>
         Sub-task
</h2>
(= href='https://issues.apache.org/jira/browse/HBASE-15386'>HBASE-15386</a>] -
                                                                                         PREFETCH_BLOCKS_ON_OPEN in
(i) (a href='https://issues.apache.org/jira/browse/HBASE-17060'>HBASE-17060</a>] -
                                                                                         backport HBASE-16570 to 1.3.1
<a href='https://issues.apache.org/jira/browse/HBASE-17561'>HBASE-17561</a>] -
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\label{linear} \hbox{$\overset{\cdot}{$<$}$ ii>[<a href='https://issues.apache.org/jira/browse/HBASE-17059'>HBASE-17059</a>] - }
                                                                                         backport HBASE-17039 to 1.3.1
<|a href='https://issues.apache.org/jira/browse/HBASE-17069'>HBASE-17069</a>] -
                                                                                         RegionServer writes invalid META entries for
```