

HBase Monitoring

How do I enable JMX in HBase

Please see HBase Metrics page for instructions.

Do I need to add a separate SPM Application for each HBase server/node I want to monitor

No, one Application is enough. Think of an SPM “Application” as a “HBase Cluster”. Thus, to monitor N HBase servers that belong to the same cluster you would create just a single SPM Application and use its Token in SPM configuration file on all HBase servers that are a part of this cluster.

Why don't some HBase metrics graphs have any data

There could be 2 possible reasons:

1. Some metrics are for RegionServers (HBase slaves), some for HBase Master. Thus, if you select the Master node in the UI, graphs that contain Slave-specific metrics will be blank and vice-versa.
2. Different versions of HBase provide different metrics. Thus, if you have an older version of HBase, it may not be providing all metrics that SPM collects and graphs.

Which versions of HBase does SPM support

SPM has been tested with HBase 0.90, 0.92, 0.94, and 0.98, but will work for newer versions, including all CDH versions.

Integration

- Instructions: <https://apps.sematext.com/ui/howto/HBase/overview>

Metrics

Metric

Name Key Agg Type Description

total jvm.memory.heap.max Memory Double Hadoop:service=HBase,name=JvmMetrics#MemMaxM

Metric				
Name	Key	Agg	Type	Description
info	jvm.log.info	Sum	Long	Hadoop:service=HBase,name=JvmMetrics#LogInfo
non heap used	jvm.nonheap.used	Avg	Double	Hadoop:service=HBase,name=JvmMetrics#MemNonHeapUsed
error	jvm.log.error	Sum	Long	Hadoop:service=HBase,name=JvmMetrics#LogError
heap committed	jvm.heap.committed	Avg	Double	Hadoop:service=HBase,name=JvmMetrics#MemHeapCommitted
heap max	jvm.heap.max	Max	Double	Hadoop:service=HBase,name=JvmMetrics#MemHeapMax
blocked	jvm.threads.blocked	Avg	Long	Hadoop:service=HBase,name=JvmMetrics#ThreadsBlocked
terminated	jvm.threads.terminated	Avg	Long	Hadoop:service=HBase,name=JvmMetrics#ThreadsTerminated
warn	jvm.log.warn	Sum	Long	Hadoop:service=HBase,name=JvmMetrics#LogWarn
timed waiting	jvm.threads.waiting	Avg	Long	Hadoop:service=HBase,name=JvmMetrics#ThreadsTimedWaiting
heap used	jvm.heap.used	Avg	Double	Hadoop:service=HBase,name=JvmMetrics#MemHeapUsed
fatal	jvm.log.fatal	Sum	Long	Hadoop:service=HBase,name=JvmMetrics#LogFatal
non heap max	jvm.nonheap.max	Avg	Double	Hadoop:service=HBase,name=JvmMetrics#MemNonHeapMax
waiting	jvm.threads.waiting	Avg	Long	Hadoop:service=HBase,name=JvmMetrics#ThreadsWaiting
new	jvm.threads.new	Avg	Long	Hadoop:service=HBase,name=JvmMetrics#ThreadsNew

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Metric				
Name	Key	Agg	Type	Description
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non heap committed	jvm.nonheap-committed	avg	Double	Hadoop:service=HBase,name=JvmMetrics#MemNonHeap
runnable	jvm.thread- runnable	avg	Long	Hadoop:service=HBase,name=JvmMetrics#ThreadsRunna
ops	hbase.ugi- group-get	sum	Long	Hadoop:service=HBase,name=UgiMetrics#GetGroupsNum
failure time	hbase.ugi- login-fail	sum	Double	Hadoop:service=HBase,name=UgiMetrics#LoginFailureAv *
				Login- Fail- ureNu- mOps
success time	hbase.ugi- login-suc	sum	Double	Hadoop:service=HBase,name=UgiMetrics#LoginSuccessAv *
				Lo- gin- Suc- cess- Nu- mOps
success ops	hbase.ugi- login-suc	sum	Long	Hadoop:service=HBase,name=UgiMetrics#LoginSuccessN
failure ops	hbase.ugi- login-fail	sum	Long	Hadoop:service=HBase,name=UgiMetrics#LoginFailureN
time	hbase.ugi- group-get	sum	Double	Hadoop:service=HBase,name=UgiMetrics#v *
				Get- Group- sNu- mOps

Metric				
Name	Key	Agg	Type	Description
syncs	hbase.	Sum	Long	Count of syncs the HLog to HDFS.Hadoop:service=HBase,name=RegionServer,sub=WAL#A
appendbase.time	hbase.	Sum	Double	Time an append to the log took.Hadoop:service=HBase,name=RegionServer,sub=WAL#A * Append-Time__mean
appendbase.max time	hbase.	Max	Double	Time an append to the log took.Hadoop:service=HBase,name=RegionServer,sub=WAL#A
sync time	hbase.	Sum	Double	Time it took to sync the HLog to HDFS.Hadoop:service=HBase,name=RegionServer,sub=WAL#A * Sync-Time__mean

Metric				
Name	Key	Agg	Type	Description
appendbase.	Sumal.append	Count		Count of appends to the log.Hadoop:service=HBase,name=RegionServer,sub=WAL
appendbase.	Sumal.append	Size		Size (in bytes) of the data appended to the HLog.Hadoop:service=HBase,name=RegionServer,sub=WAL
size				*
				Ap-pend-Size_mean
appendbase.	Maxal.append	Size		Size of the largest append.Hadoop:service=HBase,name=RegionServer,sub=WAL#A
max				
size				
appendbase.	Minal.append	Time		Time taken for the smallest append.Hadoop:service=HBase,name=RegionServer,sub=WAL#A
min				
time				
appendbase.	Sumal.append	Count		Count of appends to the log.Hadoop:service=HBase,name=RegionServer,sub=WAL

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Metric				
Name	Key	Agg	Type	Description
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sync max time	hbase.wal.syncTime	Max	Long	Hadoop:service=HBase,name=RegionServer,sub=WAL#SyncTime
append min size	hbase.wal.appendSize	Min	Long	Hadoop:service=HBase,name=RegionServer,sub=WAL#AppendSize
append min time	hbase.wal.appendTime	Min	Long	Hadoop:service=HBase,name=RegionServer,sub=WAL#AppendTime
slow ap- pend	hbase.wal.appendSlow	Sum	Long	Hadoop:service=HBase,name=RegionServer,sub=WAL#AppendSlow

Metric				
Name	Key	Agg	Type	Description
compaction.queue	hbase.regionserver.compaction.queue	Avg	Long	Current depth of the compaction request queue. If increasing, we are falling behind with store-file compaction.Hadoop:service=HBase,name=RegionServer,sub=Server
compaction.cells.size	hbase.regionserver.compaction.cells.size	Sum	Long	File size total amount of data processed during minor compactions, in bytes.Hadoop:service=HBase,name=RegionServer,sub=Server

Metric				
Name	Key	Agg	Type	Description
updates blocked time	hbase.regionserver.updatesBlockedTime	Sum	Long	Number of updates have been blocked so that the mem-store can be flushed. Hadoop:service=HBase,name=RegionServer,sub=Sum
major compacted cells	hbase.regionserver.majorCompactions	Sum	Long	The number of cells processed during major compactions. Hadoop:service=HBase,name=RegionServer,sub=Sum

Metric				
Name	Key	Agg	Type	Description
flush queue	hbase.regionserver.flush.queue	Avg	Long	Length of the queue for region flushes.If increasing, we are falling behind with clearing mem-stores out to HDFS.Hadoop:service=HBase,name=RegionServer,sub=Se
compact cells	hbase.regionserver.compaction	Sum	Long	Tells number of cells processed during minor com-pactions.Hadoop:service=HBase,name=RegionServer,sub=

Metric				
Name	Key	Agg	Type	Description
flushed cells	hbase.regionserver	sum	long	The number of cells flushed to disk. Hadoop:service=HBase,name=RegionServer,sub=Server
flushed cells size	hbase.regionserver	sum	long	The total amount of data flushed to disk, in bytes. Hadoop:service=HBase,name=RegionServer,sub=Server
major compacted cells size	hbase.master	sum	long	The total amount of data processed during major compacted, in bytes. Hadoop:service=HBase,name=Master,sub=Master
assign min time	hbase.master	min	float	The minimum time taken to assign a region to a server. Hadoop:service=HBase,name=Master,sub=Master

Metric				
Name	Key	Agg	Type	Description
rit count over thresh-old	hbase.master.hi	avg	Long	The number of regions that have been in transition longer than a threshold time (default: 60 seconds).Hadoop:service=HBase,name=Master,sub=AssignmentManager
rit count	hbase.master.hi	avg	Long	The number of regions in transition.Hadoop:service=HBase,name=Master,sub=AssignmentManager
assignshbase.master.hi	sum	avg	Long	Hadoop:service=HBase,name=Master,sub=AssignmentManager

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Metric				
Name	Key	Agg	Type	Description
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assign time	hbase.Master.DaemonHadoop	Sum	Double	Hadoop:service=HBase,name=Master,sub=AssignmentManager.*
			As-	
			sign_num_ops	
bulk as-sign time	hbase.Master.DaemonHadoop	Sum	Double	Hadoop:service=HBase,name=Master,sub=AssignmentManager.*
			BulkA-	
			s-	
			sign_num_ops	
rit old-est age	hbase.Master.LongestTime	Max	Long	The age of the longest region in transition.Hadoop:service=HBase,name=Master,sub=AssignmentManager
bulk as-sign max time	hbase.Master.DaemonHadoop	Sum	Double	Hadoop:service=HBase,name=Master,sub=AssignmentManager
assign max time	hbase.Master.DaemonHadoop	Sum	Double	Hadoop:service=HBase,name=Master,sub=AssignmentManager
bulk as-sign min time	hbase.Master.DaemonHadoop	Sum	Double	Hadoop:service=HBase,name=Master,sub=AssignmentManager

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Metric				
Name	Key	Agg	Type	Description
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get time	hbase. ops. get	Sum	Double	Hadoop:service=HBase,name=RegionServer,sub=Server#C * Get_mean
incremental max time	hbase. ops. incrmax	Max	Long	Hadoop:service=HBase,name=RegionServer,sub=Server#I
slow ap- pend	hbase. ops. append	Sum	Long	slow num- ber of Ap- pend that took over 1000ms to com- plete.Hadoop:service=HBase,name=RegionServer,sub=Ser
mutate max time	hbase. ops. mutate	Max	Long	Hadoop:service=HBase,name=RegionServer,sub=Server#M
get min time	hbase. ops. getmin	Min	Long	Hadoop:service=HBase,name=RegionServer,sub=Server#C
incremental	hbase. ops. incr	Sum	Long	Hadoop:service=HBase,name=RegionServer,sub=Server#I
replay max time	hbase. ops. replay	Max	Long	Hadoop:service=HBase,name=RegionServer,sub=Server#I
delete time	hbase. ops. delete	Sum	Double	Hadoop:service=HBase,name=RegionServer,sub=Server#I * Delete_mean

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Metric				
Name	Key	Agg	Type	Description
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slow deletes	hbase.1	Sum	Deletes	The number of Deletes that took over 1000ms to complete.Hadoop.service=HBase,name=RegionServer,sub=Server#1
delete max time	hbase.1	Max	Deletes	Hadoop.service=HBase,name=RegionServer,sub=Server#1
append	hbase.1	Sum	Appends	Hadoop.service=HBase,name=RegionServer,sub=Server#1
append max time	hbase.1	Max	Appends	Hadoop.service=HBase,name=RegionServer,sub=Server#1
delete min time	hbase.1	Min	Deletes	Hadoop.service=HBase,name=RegionServer,sub=Server#1
mutates	hbase.1	Sum	Mutates	Hadoop.service=HBase,name=RegionServer,sub=Server#1
increment min time	hbase.1	Min	Increments	Hadoop.service=HBase,name=RegionServer,sub=Server#1
append min time	hbase.1	Min	Appends	Hadoop.service=HBase,name=RegionServer,sub=Server#1
replay time	hbase.1	Sum	Replays	Hadoop.service=HBase,name=RegionServer,sub=Server#1
			*	Re-play__mean

Metric				
Name	Key	Agg	Type	Description
slow in- cre- ments	hbase.incr	slow	Long	The slow number of In-crements that took over 1000ms to complete.Hadoop:service=HBase,name=RegionServer,sub=Server#I
replay	hbase.replay	slow	Long	Hadoop:service=HBase,name=RegionServer,sub=Server#I
gets	hbase.get	slow	Long	Hadoop:service=HBase,name=RegionServer,sub=Server#C
slow gets	hbase.get	slow	Long	The number of Gets that took over 1000ms to complete.Hadoop:service=HBase,name=RegionServer,sub=Ser
mutate time	hbase.mutate	slow	Long	Hadoop:service=HBase,name=RegionServer,sub=Server#M
restore	hbase.restore	slow	Long	Hadoop:service=HBase,name=Master,sub=Snapshots#Sna
max time	hbase.max	slow	Long	Hadoop:service=HBase,name=Master,sub=Snapshots#Sna

Metric				
Name	Key	Agg	Type	Description
snapshot.time	hbase.Snapshots	DOUBLE	Time	it takes to finish snapshot().Hadoop:service=HBase,name=Master,sub=Snapshots#Snapshot-time__mean
snapshot.max time	hbase.Snapshots	LONG	Time	Hadoop:service=HBase,name=Master,sub=Snapshots#Snapshot-time__max
clone time	hbase.Snapshots	DOUBLE	Time	it takes to finish cloneSnapshot().Hadoop:service=HBase,name=Master,sub=Snapshots#Snapshot-Clone-time__mean
snapshot.count	hbase.Snapshots	LONG	Count	Count of snapshot().Hadoop:service=HBase,name=Master,sub=Snapshots#Snapshot-count

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Metric				
Name	Key	Agg	Type	Description
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restorehbase.snapshot.restore	hbase.snapshot.restore	longest	Count	Count of restoreSnapshot() invocations.Hadoop.service=HBase,name=Master,sub=Snapshots#Snapshots
clonehbase.snapshot.clone	hbase.snapshot.clone	longest	Count	Count of cloneSnapshot() invocations.Hadoop.service=HBase,name=Master,sub=Snapshots#Snapshots
cloneshbase.snapshot.clone	hbase.snapshot.clone	longest	Count	Count of cloneSnapshot() invocations.Hadoop.service=HBase,name=Master,sub=Snapshots#Snapshots
snaphbase.snapshot.restore	hbase.snapshot.restore	longest	Count	Count of restoreSnapshot() invocations.Hadoop.service=HBase,name=Master,sub=Snapshots#Snapshots
clonehbase.snapshot.clone	hbase.snapshot.clone	longest	Count	Count of cloneSnapshot() invocations.Hadoop.service=HBase,name=Master,sub=Snapshots#Snapshots

Metric				
Name	Key	Agg	Type	Description
restorehbase.snapshot.restore.time	hbase.snapshot.restore.time	DOUBLE	Time	it takes to finish restoreSnapshot().Hadoop:service=HBase,name=Master,sub=Snapshots#SnapshotRestoreTime_mean
restorehbase.snapshot.restore.min time	hbase.snapshot.restore.time	DOUBLE	Time	Hadoop:service=HBase,name=Master,sub=Snapshots#SnapshotRestoreTime_min
meta hlog split max size	hbase.master.hlog.split.size	DOUBLE	Size	HBase,name=Master,sub=FileSystem#MetaHlogSplitSize_max
hlog split size	hbase.master.hlog.split.size	DOUBLE	Size	Size of HLog files being split.Hadoop:service=HBase,name=Master,sub=FileSystem#HlogSplitSize_mean
hlog split min time	hbase.master.hlog.split.time	DOUBLE	Time	Hadoop:service=HBase,name=Master,sub=FileSystem#HlogSplitTime_min

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Metric				
Name	Key	Agg	Type	Description
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hlog split max size	hbase.Master.hlogsplitmaxsize	MAX	DOUBLE	Hadoop:service=HBase,name=Master,sub=FileSystem#HLogSplitMaxSize
hlog splits	hbase.Master.hlogsplitcount	SUM	LONG	Count of HLog.splitLog() invocations.Hadoop:service=HBase,name=Master,sub=FileSystem#HLogSplitCount
meta hlog split time	hbase.Master.MetaHlogSplitTime	DOUBLE	DOUBLE	Time it takes to finish split-MetaLog().Hadoop:service=HBase,name=Master,sub=FileSystem#MetaHlogSplitTime_mean
meta hlog split max time	hbase.Master.hlogsplitmaxtime	MAX	DOUBLE	Hadoop:service=HBase,name=Master,sub=FileSystem#MetaHlogSplitMaxTime

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Metric				
Name	Key	Agg	Type	Description
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hlog split time	hbase.master.logsplit	sum	Double	Time it takes to fin- ish HLog.splitLog().Hadoop:service=HBase,name=Master,sub= * HlogSplit- Time_mean
hlog split min size	hbase.master.logsplit	min	Long	File size.Hadoop:service=HBase,name=Master,sub=FileSystem#H
meta hlog splits	hbase.master.logmeta	sum	Long	Count of split- Met- a- Log() in- vo- ca- tions.Hadoop:service=HBase,name=Master,sub=FileSystem
meta hlog split min size	hbase.master.logmeta	min	Long	File size.Hadoop:service=HBase,name=Master,sub=FileSystem#M
meta hlog split min time	hbase.master.logmeta	min	Long	File size.Hadoop:service=HBase,name=Master,sub=FileSystem#M

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Metric				
Name	Key	Agg	Type	Description
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meta hlog splits	hbase:meta	sum	Long	Count of split-Log() in-volume of splits. tions.Hadoop:service=HBase,name=Master,sub=FileSystem
hlog split max time	hbase:master	max	Long	Maximum time to split a log. tions.Hadoop:service=HBase,name=Master,sub=FileSystem#HLogSplitMaxTime
hlog splits	hbase:master	sum	Long	Count of HLog.splitLog() in-volume of splits. tions.Hadoop:service=HBase,name=Master,sub=FileSystem
meta hlog split size	hbase:meta	sum	Double	Size of hbase:meta HLog files being split. split.Hadoop:service=HBase,name=Master,sub=FileSystem* MetaHlogSplit-Size_mean
lower limit	hbase:regionserver	avg	Long	Average size of region server's memstore. 'hbase.regionserver.global.memstore.lowerLimit' value.

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Metric				
Name	Key	Agg	Type	Description
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static bloom size	hbase.regionserver.staticbloomsize	Avg	Long	Uncompressed size of the static bloom filters.Hadoop:service=HBase,name=RegionServer,sub=Server
store files	hbase.regionserver.storefiles	Avg	Long	Number of Store Files.Hadoop:service=HBase,name=RegionServer,sub=Server
store file in-dex size	hbase.regionserver.storefileindexsize	Avg	Long	Size of in-dexes in store-files on disk.Hadoop:service=HBase,name=RegionServer,sub=Server
store file size	hbase.regionserver.storefilesize	Avg	Long	Size of store-files being served.Hadoop:service=HBase,name=RegionServer,sub=Server
mem store size	hbase.regionserver.memstoresize	Avg	Long	Size of the mem-store.Hadoop:service=HBase,name=RegionServer,sub=Server

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Metric				
Name	Key	Agg	Type	Description
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static index size	hbase.regionserver.staticIndexSize	Avg	Long	Size of the static indexes.Hadoop:service=HBase,name=RegionServer,sub=Server
upper limit	hbase.regionserver.global.memstore.upperLimit	Max	Long	Upper limit value.
stores	hbase.regionserver.stores	Avg	Long	Number of Stores.Hadoop:service=HBase,name=RegionServer,sub=Server
regions	hbase.regionserver.regs	Avg	Long	Number of re-gions.Hadoop:service=HBase,name=RegionServer,sub=Server
active handlers	hbase.ipc.handler.active	Avg	Long	Number of active rpc handlers.Hadoop:service=HBase,name=IPC,sub=IPC#numActive
process call time	hbase.ipc.processCallTime	Sum	Double	Hadoop:service=HBase,name=IPC,sub=IPC#ProcessCallTime * ProcessCallTime_num_ops
process call min time	hbase.ipc.processCallTime	Min	Double	Hadoop:service=HBase,name=IPC,sub=IPC#ProcessCallTime

Metric				
Name	Key	Agg	Type	Description
calls in priority queue	hbase.ipc.queue.length	avg	Long	The size number of currently enqueued priority (internal house-keeping) requests. Hadoop:service=HBase,name=IPC,sub=IPC#numC
authorization successes	hbase.ipc.authorization.successes	sum	Long	Number of authorization successes. Hadoop:service=HBase,name=IPC,sub=IPC#autho
received bytes	hbase.ipc.bytesReceived	sum	Long	Number of bytes received. Hadoop:service=HBase,name=IPC,sub=IPC#receiv
sent bytes	hbase.ipc.bytesSent	sum	Long	Number of bytes sent. Hadoop:service=HBase,name=IPC,sub=IPC#sentByt

Metric				
Name	Key	Agg	Type	Description
authorization failures	hbase.ipc.authz.failures	Sum	Long	The number of authorization failures. Hadoop:service=HBase,name=IPC,sub=IPC#authorization failures
process call max time	hbase.ipc.processing.maxtime	Max	Long	The maximum time taken by a process call. Hadoop:service=HBase,name=IPC,sub=IPC#ProcessCallTime
calls in replication queue	hbase.ipc.replication.queue.calls	Agg	Long	The number of calls in the replication queue. Hadoop:service=HBase,name=IPC,sub=IPC#numCallsInReplicationQueue
process calls	hbase.ipc.process.calls	Sum	Long	The number of process calls. Hadoop:service=HBase,name=IPC,sub=IPC#ProcessCalls
calls in general queue	hbase.ipc.replication.queue.calls	Agg	Long	The number of calls in the general queue. Hadoop:service=HBase,name=IPC,sub=IPC#numCallsInGeneralQueue

Metric				
Name	Key	Agg	Type	Description
queue call time	hbase.ipc.queue.call.time	Sum	Double	Hadoop:service=HBase,name=IPC,sub=IPC#QueueCallTime_num_ops
queue call min time	hbase.ipc.queue.call.min.time	Min	Long	Hadoop:service=HBase,name=IPC,sub=IPC#QueueCallTime_min_ops
queue call max time	hbase.ipc.queue.call.max.time	Max	Long	Hadoop:service=HBase,name=IPC,sub=IPC#QueueCallTime_max_ops
queue size	hbase.ipc.queue.size	Avg	Long	Number of bytes in the call queues.Hadoop:service=HBase,name=IPC,sub=IPC#queue_size
authentication failures	hbase.rpc.authentication.failures	Sum	Long	Number of authentication failures.Hadoop:service=HBase,name=IPC,sub=IPC#authentication_failures
queue calls	hbase.ipc.queue.calls	Sum	Long	Hadoop:service=HBase,name=IPC,sub=IPC#QueueCallTime_num_ops

Metric				
Name	Key	Agg	Type	Description
open con- nec- tions	hbase.ipc	avg	connections	The number of open con- nec- tions at the RPC layer. Hadoop:service=HBase,name=IPC,sub=IPC#numOpenConnections
authentication suc- cesses	hbase.ipc	sum	authentication successes	The number of authentication successes. Hadoop:service=HBase,name=IPC,sub=IPC#authenticationSuccesses
total re- quests	hbase.regionserver	sum	requests	Total number of re- quests this Re- gion- Server has an- swered. Hadoop:service=HBase,name=RegionServer,sub=Server#totalRequests
read re- quests	hbase.regionserver	sum	read requests	Hadoop:service=HBase,name=RegionServer,sub=Server#readRequests

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Metric				
Name	Key	Agg	Type	Description
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write re-requests	hbase.summary.hbase.requests.write	Sum	Integer	Hadoop:service=HBase,name=RegionServer,sub=Server#v
applied ops	hbase.summary.hbase.replication.ops.applied	Sum	Integer	Hadoop:service=HBase,name=RegionServer,sub=Replicati
applied batches	hbase.summary.hbase.replication.batches.applied	Sum	Integer	Hadoop:service=HBase,name=RegionServer,sub=Replicati
balance min time	hbase.summary.hbase.master.balance.min	Min	Double	Hadoop:service=HBase,name=Master,sub=Balancer#Bala
ops	hbase.summary.hbase.master.balance.ops	Avg	Double	Hadoop:service=HBase,name=Master,sub=Balancer#Bala
time	hbase.summary.hbase.master.balance.time	Sum	Double	Hadoop:service=HBase,name=Master,sub=Balancer#Bala
			*	
			Bal-	
			ancer-	
			Clus-	
			ter_mean	
misc in-vo-cations	hbase.summary.hbase.master.balance.misc	Sum	Double	Hadoop:service=HBase,name=Master,sub=Balancer#misc
balance max time	hbase.summary.hbase.master.balance.max	Max	Double	Hadoop:service=HBase,name=Master,sub=Balancer#Bala

Metric				
Name	Key	Agg	Type	Description
flushed cells	hbase.r	Sum	Long	Number of mob cells flushed to disk. Hadoop:service=HBase,name=RegionServer,sub=Server
scan cells size	hbase.r	Sum	Long	Total amount of scanned mob cells, in bytes. Hadoop:service=HBase,name=RegionServer,sub=Server
file cache hits	hbase.r	Avg	Float	Percentage of the mob file cache hits. Hadoop:service=HBase,name=RegionServer,sub=Server
file caches	hbase.r	Avg	Long	Count of cached mob files. Hadoop:service=HBase,name=RegionServer,sub=Server

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Metric				
Name	Key	Agg	Type	Description
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compactmobcells	hbase.mob	Sum	Long	The number of cells moved to mob during compaction. Hadoop:service=HBase,name=RegionServer,sub=Server
filecacheaccesses	hbase.mob	Sum	Long	The count of accesses to the mob file cache. Hadoop:service=HBase,name=RegionServer,sub=Server
scanmobcells	hbase.mob	Sum	Long	The number of scanned mob cells. Hadoop:service=HBase,name=RegionServer,sub=Server
filecachemisses	hbase.mob	Sum	Long	The count of misses to the mob file cache. Hadoop:service=HBase,name=RegionServer,sub=Server

Metric	Name	Key	Agg	Type	Description
compactness	compactness	mob	Sum	Long	The number of cells moved from mob during compaction.
compactness	compactness	mob	Sum	Long	The number of cells moved from mob during compaction, in bytes.

Metric				
Name	Key	Agg	Type	Description
compactmobcellsfromsize	hbase.mob	Sum	Long	The amount of cells moved from mob during compaction, in bytes.Hadoop:service=HBase,name=RegionServer,sub=Server
filecacheevictions	hbase.mob	Sum	Long	The number of items evicted from the mob file cache.Hadoop:service=HBase,name=RegionServer,sub=Server
flusheshbase.mob	hbase.mob	Sum	Long	The number of the flushes in mob-enabled stores.Hadoop:service=HBase,name=RegionServer,sub=Server

Metric				
Name	Key	Agg	Type	Description
flushed cells size	hbase.rmob.files.size	Sum	Long	The total amount of mob cells flushed to disk, in bytes.Hadoop:service=HBase,name=RegionServer,sub=Server
local files	hbase.rmob.local.files	Avg	Long	The percent of HFiles that are stored on the local hdfs data node.Hadoop:service=HBase,name=RegionServer,sub=Server
hlog files	hbase.rmob.hlog.files	Avg	Long	The number of write ahead logs not yet archived.Hadoop:service=HBase,name=RegionServer,sub=Server

Metric				
Name	Key	Agg	Type	Description
hlog files size	hbase.regionserver. hlog.files.size	Avg	Long	Size of all HLog Files.Hadoop:service=HBase,name=RegionServer,sub=Server
cluster re- quests	hbase.master. cluster.requests	Sum	Long	Hadoop:service=HBase,name=Master,sub=Server#cluster
dead re- gion servers	hbase.master. dead.servers	Avg	Double	Hadoop:service=HBase,name=Master,sub=Server#numDe
region servers	hbase.master. region.servers	Avg	Double	Hadoop:service=HBase,name=Master,sub=Server#numRe
average load	hbase.master. average.load	Avg	Double	Hadoop:service=HBase,name=Master,sub=Server#average
mutatio- n with- out wal	hbase.regionserver. mutations.without.wal	Sum	Long	Number of mu- ta- tions that have been sent by clients with the write ahead log- ging turned off.Hadoop:service=HBase,name=RegionServer,sub=Server

Metric				
Name	Key	Agg	Type	Description
mutatehbase.ops.failed	ops	sum	Long	Number of Check and Mutate calls that failed the checks.Hadoop:service=HBase,name=RegionServer,sub=Server
mutatehbase.ops.passed	ops	sum	Long	Number of Check and Mutate calls that passed the checks.Hadoop:service=HBase,name=RegionServer,sub=Server
mutatehbase.ops.withoutwal.size	ops	sum	Long	Size of data that has been sent by clients with the write ahead logging turned off.Hadoop:service=HBase,name=RegionServer,sub=Server

Metric				
Name	Key	Agg	Type	Description
hits	hbase.cache.hits	sum	long	Count of the hit on the block cache.Hadoop:service=HBase,name=RegionServer,sub=Server
expresshit%	hbase.cache.hit%	avg	float	The rate per-cent of the time that re-quests with the cache turned on hit the cache.Hadoop:service=HBase,name=RegionServer,sub=Server
hit%	hbase.cache.hit%	avg	float	Percent of block cache re-quests that are hits.Hadoop:service=HBase,name=RegionServer,sub=Server

Metric				
Name	Key	Agg	Type	Description
cache free size	hbase.cache.free.size	Avg	Long	Size of the block cache that is not occupied. Hadoop:service=HBase,name=RegionServer,sub=Server
block cache size	hbase.cache.block.size	Avg	Long	Size of the block cache. Hadoop:service=HBase,name=RegionServer,sub=Server
miss	hbase.cache.misses	Sum	Long	Number of re-quests for a block that missed the block cache. Hadoop:service=HBase,name=RegionServer,sub=Server
cache count	hbase.cache.count	Avg	Long	Number of block in the block cache. Hadoop:service=HBase,name=RegionServer,sub=Server

Metric				
Name	Key	Agg	Type	Description
evictions	hbase.cache.evictions	Count		Count of the number of blocks evicted from the block cache.Hadoop:service=HBase,name=RegionServer,sub=Server
shipped batches	hbase.replication.hadoopshipped	Sum		HBase,name=RegionServer,sub=Replication
shipped ops	hbase.replication.hadoopshipped	Sum		HBase,name=RegionServer,sub=Replication
log ed-its read	hbase.replication.hadoopsend	Sum		HBase,name=RegionServer,sub=Replication
log queue	hbase.replication.hadoopsend	Sum		HBase,name=RegionServer,sub=Replication
shipped bytes	hbase.replication.hadoopshipped	Sum		HBase,name=RegionServer,sub=Replication
log ed-its fil-tered	hbase.replication.hadoopfilter	Sum		HBase,name=RegionServer,sub=Replication
log read bytes	hbase.replication.hadoopsend	Sum		HBase,name=RegionServer,sub=Replication

Metric				
Name	Key	Agg	Type	Description
hedgebase.readwins	hbase.serve	Sum	Long	The number of times we started a hedged read and a hedged read won.Hadoop:service=HBase,name=RegionServer,sub=Server
hedgebase.reads	hbase.serve	Sum	Long	The number of times we started a hedged read.Hadoop:service=HBase,name=RegionServer,sub=Server
stores	hbase.store	Avg	Long	
flushes	hbase.flush	Sum	Long	
compactions	hbase.comp	Sum	Long	
store files	hbase.store	Avg	Long	
store file index size	hbase.store	Avg	Long	

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Metric	Name	Key	Agg	Type Description
	<hr/>			
	sync	hbase.hsync	Max	Latency.max
	read	hbase.hread	Max	Latency.max
	write	hbase.hwrite	Max	Latency.max
	sync	hbase.hsync	Min	Latency.min
	read	hbase.hread	Min	Latency.min
	write	hbase.hwrite	Min	Latency.min
flush queue	hbase.hflush	Double	Sum	Queue.size
max	hbase.hflush	Max	Sum	Store.flushes.time.max
min	hbase.hflush	Min	Sum	Store.flushes.time.min
flushes	hbase.hflush	Sum	Sum	Store.flushes
max	hbase.hflush	Max	Sum	Store.flushes
memstore size	hbase.hmemstore	Max	Sum	Store.size
min	hbase.hmemstore	Min	Sum	Store.size
min	hbase.hcompact	Min	Sum	Store.flushes.time.min
max	hbase.hcompact	Max	Sum	Store.flushes.time.max
max	hbase.hcompact	Max	Sum	Store.flushes.size.max
compact	hbase.hcompact	Sum	Sum	Store.flushes
compact queue	hbase.hcompact	Double	Sum	Store.flushes.size
min	hbase.hcompact	Min	Sum	Store.flushes.size.min

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Metric				
Name	Key	Agg	Type	Description
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cache size	hbase.cache.size	Avg	Long	Block size
miss count	hbase.cache.miss.count	Sum	Long	Block misses
cache free	hbase.cache.free	Avg	Long	Block free
hit count	hbase.cache.hit.count	Sum	Long	Block hits
block cache count	hbase.block.cache.count	Avg	Long	Block count
block cache hits ratio	hbase.block.cache.hits.ratio	Avg	Double	Block hits ratio
evicted count	hbase.cache.evicted.count	Sum	Long	Block evictions
block cache hits ratio	hbase.block.cache.hits.ratio	Avg	Double	Block hits ratio
max splits	hbase.splits.max	Max	Long	Max splits
splits	hbase.splits	Sum	Long	Splits
max splits size	hbase.splits.size.max	Max	Long	Max splits size
min splits size	hbase.splits.size.min	Min	Long	Min splits size
splits	hbase.splits	Sum	Long	Splits
regions	hbase.regions	Avg	Long	Regions
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Metric				
Name	Key	Agg	Type	Description
total max	jvm.mem. max	Max	Double	Hadoop:service=HBase,name=JvmMetrics#MemMaxM
info	jvm.log. info	Sum	Long	Hadoop:service=HBase,name=JvmMetrics#LogInfo
non heap used	jvm.non- heap. used	Avg	Double	Hadoop:service=HBase,name=JvmMetrics#MemNonHeap
error	jvm.log. error	Sum	Long	Hadoop:service=HBase,name=JvmMetrics#LogError
heap com- mit- ted	jvm.heap. committed	Avg	Double	Hadoop:service=HBase,name=JvmMetrics#MemHeapCom
heap max	jvm.heap. max	Max	Double	Hadoop:service=HBase,name=JvmMetrics#MemHeapMax
blocked	jvm.threads. blocked	Avg	Long	Hadoop:service=HBase,name=JvmMetrics#ThreadsBlocke
terminated	jvm.threads. terminated	Avg	Long	Hadoop:service=HBase,name=JvmMetrics#ThreadsTermin
warn	jvm.log. warn	Sum	Long	Hadoop:service=HBase,name=JvmMetrics#LogWarn
timed wait- ing	jvm.threads. waiting	Avg	Long	Hadoop:service=HBase,name=JvmMetrics#ThreadsTimed
heap used	jvm.heap. used	Avg	Double	Hadoop:service=HBase,name=JvmMetrics#MemHeapUsed
fatal	jvm.log. fatal	Sum	Long	Hadoop:service=HBase,name=JvmMetrics#LogFatal
non heap max	jvm.non- heap. max	Avg	Double	Hadoop:service=HBase,name=JvmMetrics#MemNonHeap
waiting	jvm.threads. waiting	Avg	Long	Hadoop:service=HBase,name=JvmMetrics#ThreadsWaitin
new	jvm.threads. new	Avg	Long	Hadoop:service=HBase,name=JvmMetrics#ThreadsNew

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Metric				
Name	Key	Agg	Type	Description
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non heap committed	jvm.nonheap-committed	avg	Double	Hadoop:service=HBase,name=JvmMetrics#MemNonHeap
runnable	jvm.thread- runnable	avg	Long	Hadoop:service=HBase,name=JvmMetrics#ThreadsRunna
ops	hbase.ugi- group-get	sum	Long	Hadoop:service=HBase,name=UgiMetrics#GetGroupsNum
failure time	hbase.ugi- login-fail	sum	Double	Hadoop:service=HBase,name=UgiMetrics#LoginFailureAv *
				Login- Fail- ureNu- mOps
success time	hbase.ugi- login-suc	sum	Double	Hadoop:service=HBase,name=UgiMetrics#LoginSuccessAv *
				Lo- gin- Suc- cess- Nu- mOps
success ops	hbase.ugi- login-suc	sum	Long	Hadoop:service=HBase,name=UgiMetrics#LoginSuccessN
failure ops	hbase.ugi- login-fail	sum	Long	Hadoop:service=HBase,name=UgiMetrics#LoginFailureN
time	hbase.ugi- group-get	sum	Double	Hadoop:service=HBase,name=UgiMetrics#v *
				Get- Group- sNu- mOps

Metric				
Name	Key	Agg	Type	Description
syncs	hbase.	Sum	Long	Count of syncs the HLog to HDFS.Hadoop:service=HBase,name=RegionServer,sub=WAL#A
appendbase.time	hbase.	Sum	Double	Time an append to the log took.Hadoop:service=HBase,name=RegionServer,sub=WAL#A * Append-Time__mean
appendbase.max time	hbase.	Max	Double	Time an append to the log took.Hadoop:service=HBase,name=RegionServer,sub=WAL#A
sync time	hbase.	Sum	Double	Time it took to sync the HLog to HDFS.Hadoop:service=HBase,name=RegionServer,sub=WAL#A * Sync-Time__mean

Metric				
Name	Key	Agg	Type	Description
appendbase.	Sumal.append	Count		Count of appends to the log.Hadoop:service=HBase,name=RegionServer,sub=WAL
appendbase.	Sumal.append	Size		Size (in bytes) of the data appended to the HLog.Hadoop:service=HBase,name=RegionServer,sub=WAL
size				*
				Ap-pend-Size_mean
appendbase.	Maxal.append	Size		Size of the largest append.Hadoop:service=HBase,name=RegionServer,sub=WAL#A
max				
size				
appendbase.	Minal.append	Time		Time taken for the smallest append.Hadoop:service=HBase,name=RegionServer,sub=WAL#A
min				
time				
appendbase.	Sumal.append	Count		Count of appends to the log.Hadoop:service=HBase,name=RegionServer,sub=WAL

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Metric				
Name	Key	Agg	Type	Description
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sync max time	hbase.wal.syncTime	Max	Long	Hadoop:service=HBase,name=RegionServer,sub=WAL#SyncTime
append min size	hbase.wal.appendSize	Min	Long	Hadoop:service=HBase,name=RegionServer,sub=WAL#AppendSize
append min time	hbase.wal.appendTime	Min	Long	Hadoop:service=HBase,name=RegionServer,sub=WAL#AppendTime
slow ap- pend	hbase.wal.appendSlow	Sum	Long	Hadoop:service=HBase,name=RegionServer,sub=WAL#AppendSlow

Metric				
Name	Key	Agg	Type	Description
compaction.queue	hbase.regionserver	Avg	Compaction	Current depth of the compaction request queue. If increasing, we are falling behind with store-file compaction.Hadoop:service=HBase,name=RegionServer,sub=Server
compaction.cells.size	hbase.regionserver	Sum	Compaction	File size total amount of data processed during minor compactions, in bytes.Hadoop:service=HBase,name=RegionServer,sub=Server

Metric				
Name	Key	Agg	Type	Description
updates blocked time	hbase.regionserver.updatesBlockedTime	Sum	Long	Number of updates have been blocked so that the mem-store can be flushed. Hadoop:service=HBase,name=RegionServer,sub=
major compacted cells	hbase.regionserver.majorCompactions	Sum	Long	The number of cells processed during major compactions. Hadoop:service=HBase,name=RegionServer,sub=

Metric				
Name	Key	Agg	Type	Description
flush queue	hbase.regionserver.flush	Avg	Long	Length of the queue for region flushes. If increasing, we are falling behind with clearing mem-stores out to HDFS. Hadoop:service=HBase,name=RegionServer,sub=Se
compact cells	hbase.regionserver.compact	Sum	Long	Tells number of cells processed during minor com-pactions. Hadoop:service=HBase,name=RegionServer,sub=

Metric				
Name	Key	Agg	Type	Description
flushed cells	hbase.regionserver	sum	long	The number of cells flushed to disk. Hadoop:service=HBase,name=RegionServer,sub=Server
flushed cells size	hbase.regionserver	sum	long	The total amount of data flushed to disk, in bytes. Hadoop:service=HBase,name=RegionServer,sub=Server
major compacted cells size	hbase.master	sum	long	The total amount of data processed during major compacted, in bytes. Hadoop:service=HBase,name=Master,sub=Master
assign min time	hbase.master	min	float	The minimum time taken to assign a region to a server. Hadoop:service=HBase,name=Master,sub=Master

Metric				
Name	Key	Agg	Type	Description
rit count over thresh-old	hbase.master.hi	Long	Long	The number of regions that have been in transition longer than a threshold time (default: 60 seconds).Hadoop:service=HBase,name=Master,sub=AssignmentManager
rit count	hbase.master.hi	Long	Long	The number of regions in transition.Hadoop:service=HBase,name=Master,sub=AssignmentManager
assignshbase.master.hi	Long	Long	Long	Hadoop:service=HBase,name=Master,sub=AssignmentManager

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Metric				
Name	Key	Agg	Type	Description
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assign time	hbase.Master.DaemonHadoop	sum	double	Hadoop:service=HBase,name=Master,sub=AssignmentManager.*
			As-	
			sign_num_ops	
bulk as-sign time	hbase.Master.DaemonHadoop	sum	double	Hadoop:service=HBase,name=Master,sub=AssignmentManager.*
			BulkA-	
			s-	
			sign_num_ops	
rit old-est age	hbase.Master.Hadoop	max	long	The age of the longest re-gion in tran-sition.Hadoop:service=HBase,name=Master,sub=AssignmentManager
bulk as-sign max time	hbase.Master.Hadoop	max	double	Hadoop:service=HBase,name=Master,sub=AssignmentManager
assign max time	hbase.Master.Hadoop	max	double	Hadoop:service=HBase,name=Master,sub=AssignmentManager
bulk as-sign min time	hbase.Master.Hadoop	min	double	Hadoop:service=HBase,name=Master,sub=AssignmentManager

Metric				
Name	Key	Agg	Type	Description
bulk as- signs	hbase.master.hbase.as-signs	Sum	Double	Hadoop:service=HBase,name=Master,sub=AssignmentManager
incremental time	hbase.regionserver.incremental.time	Sum	Double	Hadoop:service=HBase,name=RegionServer,sub=Server#ID
slow_puts	hbase.regionserver.slow_puts	Sum	Double	The number of Puts that took over 1000ms to complete.Hadoop:service=HBase,name=RegionServer,sub=Server#ID
get max time	hbase.regionserver.get.max.time	Max	Double	Hadoop:service=HBase,name=RegionServer,sub=Server#ID
append time	hbase.regionserver.append.time	Sum	Double	Hadoop:service=HBase,name=RegionServer,sub=Server#ID
deletes	hbase.regionserver.deletes	Sum	Double	Hadoop:service=HBase,name=RegionServer,sub=Server#ID
replay min time	hbase.regionserver.replay.min.time	Min	Double	Hadoop:service=HBase,name=RegionServer,sub=Server#ID
mutate min time	hbase.regionserver.mutate.min.time	Min	Double	Hadoop:service=HBase,name=RegionServer,sub=Server#ID

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Metric				
Name	Key	Agg	Type	Description
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get time	hbase. ops. get	Sum	Double	Hadoop:service=HBase,name=RegionServer,sub=Server#C * Get_mean
incremental max time	hbase. ops. incr	Max	Long	Hadoop:service=HBase,name=RegionServer,sub=Server#I
slow ap- pend	hbase. ops. append	Sum	Long	slow num- ber of Ap- pend that took over 1000ms to com- plete.Hadoop:service=HBase,name=RegionServer,sub=Ser
mutate max time	hbase. ops. mutate	Max	Long	Hadoop:service=HBase,name=RegionServer,sub=Server#M
get min time	hbase. ops. get	Min	Long	Hadoop:service=HBase,name=RegionServer,sub=Server#C
incremental	hbase. ops. incr	Sum	Long	Hadoop:service=HBase,name=RegionServer,sub=Server#I
replay max time	hbase. ops. replay	Max	Long	Hadoop:service=HBase,name=RegionServer,sub=Server#I
delete time	hbase. ops. delete	Sum	Double	Hadoop:service=HBase,name=RegionServer,sub=Server#I * Delete_mean

Metric				
Name	Key	Agg	Type	Description
slow deletes	hbase.1	Sum	Deletes	Deletes that took over 1000ms to complete.Hadoop:service=HBase,name=RegionServer,sub=Server#1
delete max time	hbase.1	Max	Deletes	Hadoop:service=HBase,name=RegionServer,sub=Server#1
append min time	hbase.1	Min	Appends	Hadoop:service=HBase,name=RegionServer,sub=Server#1
append max time	hbase.1	Max	Appends	Hadoop:service=HBase,name=RegionServer,sub=Server#1
delete min time	hbase.1	Min	Deletes	Hadoop:service=HBase,name=RegionServer,sub=Server#1
mutated min time	hbase.1	Min	Mutates	Hadoop:service=HBase,name=RegionServer,sub=Server#1
increment min time	hbase.1	Min	Increments	Hadoop:service=HBase,name=RegionServer,sub=Server#1
append min time	hbase.1	Min	Appends	Hadoop:service=HBase,name=RegionServer,sub=Server#1
replay time	hbase.1	Sum	Replays	Hadoop:service=HBase,name=RegionServer,sub=Server#1 * Re-play__mean

Metric				
Name	Key	Agg	Type	Description
slow in- cre- ments	hbase. slow in- cre- ments	sum	long	The slow number of In-crements that took over 1000ms to complete.Hadoop:service=HBase,name=RegionServer,sub=Server#I
replay	hbase. replay	sum	long	Hadoop:service=HBase,name=RegionServer,sub=Server#I
gets	hbase. gets	sum	long	Hadoop:service=HBase,name=RegionServer,sub=Server#C
slow gets	hbase. slow gets	sum	long	The number of Gets that took over 1000ms to complete.Hadoop:service=HBase,name=RegionServer,sub=Ser
mutate time	hbase. mutate time	sum	double	Hadoop:service=HBase,name=RegionServer,sub=Server#M * Mu- tate_mean
restore max time	hbase. restore max time	sum	long	Hadoop:service=HBase,name=Master,sub=Snapshots#Sna

Metric				
Name	Key	Agg	Type	Description
snapshot time	hbase.Snapshots	DOUBLE	Time	it takes to finish snapshot().Hadoop:service=HBase,name=Master,sub=Snapshots#SnapshotTime__mean
snapshot max time	hbase.Snapshots	LONG	Time	Hadoop:service=HBase,name=Master,sub=Snapshots#SnapshotTime__max
clone time	hbase.Snapshots	DOUBLE	Time	it takes to finish cloneSnapshot().Hadoop:service=HBase,name=Master,sub=Snapshots#SnapshotCloneTime__mean
snapshot count	hbase.Snapshots	LONG	Count	Count of snapshot().Hadoop:service=HBase,name=Master,sub=Snapshots#SnapshotCount

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Metric				
Name	Key	Agg	Type	Description
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restorehbase.snapshot.longestClone	hbase.snapshot.longestClone	max	Count	Count of re-storeSnapshot() invocations.Hadoop.service=HBase,name=Master,sub=Snapshots#Snapshots
clone min time	hbase.snapshot.longestClone	min	Count	Count of cloneSnapshot() invocations.Hadoop.service=HBase,name=Master,sub=Snapshots#Snapshots
clones	hbase.snapshot.longestClone	max	Count	Count of cloneSnapshot() invocations.Hadoop.service=HBase,name=Master,sub=Snapshots#Snapshots
snapshot min time	hbase.snapshot.longestClone	min	Count	Count of snapshot() invocations.Hadoop.service=HBase,name=Master,sub=Snapshots#Snapshots
clone max time	hbase.snapshot.longestClone	max	Count	Count of cloneSnapshot() invocations.Hadoop.service=HBase,name=Master,sub=Snapshots#Snapshots

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Metric				
Name	Key	Agg	Type	Description
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restorehbase.snapshot.restore.time	hbase.snapshot.restore.time	sum	Double	Time it takes to finish restoreSnapshot().Hadoop:service=HBase,name=Master,sub=Snapshots#SnapshotRestoreTime_mean
restorehbase.snapshot.restore.min time	hbase.snapshot.restore.time	min	Double	Time it takes to finish restoreSnapshot().Hadoop:service=HBase,name=Master,sub=Snapshots#SnapshotRestoreTime_min
meta hlog split max size	hbase.master.hlog.split.size	max	Long	Maximum size of HLog split.Hadoop:service=HBase,name=Master,sub=FileSystem#MetaHLogSplitSize_max
hlog split size	hbase.master.hlog.split.size	sum	Double	Size of HLog files being split.Hadoop:service=HBase,name=Master,sub=FileSystem#MetaHLogSplitSize_mean
hlog split min time	hbase.master.hlog.split.time	min	Double	Minimum time to split HLog files.Hadoop:service=HBase,name=Master,sub=FileSystem#MetaHLogSplitTime_min

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Metric				
Name	Key	Agg	Type	Description
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hlog split max size	hbase.Master.hlogsplitmaxsize	MAX	DOUBLE	Hadoop:service=HBase,name=Master,sub=FileSystem#HLogSplitMaxSize
hlog splits	hbase.Master.hlogsplitcount	SUM	DOUBLE	Count of HLog.splitLog() invocations.Hadoop:service=HBase,name=Master,sub=FileSystem#HLogSplitCount
meta hlog split time	hbase.Master.hlogsplittime	DOUBLE	DOUBLE	Time it takes to finish split-MetaLog().Hadoop:service=HBase,name=Master,sub=FileSystem#MetaHlogSplitTime_mean
meta hlog split max time	hbase.Master.hlogsplittime	MAX	DOUBLE	Hadoop:service=HBase,name=Master,sub=FileSystem#MetaHlogSplitTime_max

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Metric				
Name	Key	Agg	Type	Description
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hlog split time	hbase.master.logsplit	sum	Double	Time it takes to fin- ish HLog.splitLog().Hadoop:service=HBase,name=Master,sub= * HlogSplit- Time_mean
hlog split min size	hbase.master.logsplit	min	Long	Hasize:service=HBase,name=Master,sub=FileSystem#H
meta hlog splits	hbase.master.logmeta	sum	Long	Count of split- Met- a- Log() in- vo- ca- tions.Hadoop:service=HBase,name=Master,sub=FileSystem
meta hlog split min size	hbase.master.logmeta	min	Long	Hasize:service=HBase,name=Master,sub=FileSystem#M
meta hlog split min time	hbase.master.logmeta	min	Long	Hasize:service=HBase,name=Master,sub=FileSystem#M

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Metric				
Name	Key	Agg	Type	Description
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meta hlog splits	hbase:meta	sum	Long	Count of split-Log() in-volume of splits. tions.Hadoop:service=HBase,name=Master,sub=FileSystem
hlog split max time	hbase:master	avg	Long	Time to split a log. tions.Hadoop:service=HBase,name=Master,sub=FileSystem#HLog
hlog splits	hbase:master	sum	Long	Count of HLog.splitLog() in-volume of splits. tions.Hadoop:service=HBase,name=Master,sub=FileSystem
meta hlog split size	hbase:meta	avg	Double	Size of hbase:meta HLog files being split. split.Hadoop:service=HBase,name=Master,sub=FileSystem* MetaHlogSplit-Size_mean
lower limit	hbase:regionserver	avg	Long	Lower limit of region server memstore. 'hbase.regionserver.global.memstore.lowerLimit' value.

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Metric				
Name	Key	Agg	Type	Description
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static bloom size	hbase.rstatic.bloom.size	Avg	Long	Size of the static bloom filters. Hadoop:service=HBase,name=RegionServer,sub=Server
store files	hbase.rstore.files	Avg	Long	Number of Store Files. Hadoop:service=HBase,name=RegionServer,sub=Server
store file index size	hbase.rstore.files.index.size	Avg	Long	Size of indexes in store-files on disk. Hadoop:service=HBase,name=RegionServer,sub=Server
store file size	hbase.rstore.files.size	Avg	Long	Size of store-files being served. Hadoop:service=HBase,name=RegionServer,sub=Server
mem store size	hbase.rmemstore.size	Avg	Long	Size of the mem-store. Hadoop:service=HBase,name=RegionServer,sub=Server

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Metric				
Name	Key	Agg	Type	Description
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static index size	hbase.regionserver.staticIndexSize	Avg	Long	Size of the static indexes.Hadoop:service=HBase,name=RegionServer,sub=Server
upper limit	hbase.regionserver.global.memstore.upperLimit	Max	Long	Upper limit value.
stores	hbase.regionserver.stores	Avg	Long	Number of Stores.Hadoop:service=HBase,name=RegionServer,sub=Server
regions	hbase.regionserver.region	Avg	Long	Number of regions.Hadoop:service=HBase,name=RegionServer,sub=Server
active handlers	hbase.ipc.handler.active	Avg	Long	Number of active rpc handlers.Hadoop:service=HBase,name=IPC,sub=IPC#numActive
process call time	hbase.ipc.processCallTime	Sum	Double	Hadoop:service=HBase,name=IPC,sub=IPC#ProcessCallTime * ProcessCallTime_num_ops
process call min time	hbase.ipc.processCallTime	Min	Double	Hadoop:service=HBase,name=IPC,sub=IPC#ProcessCallTime

Metric				
Name	Key	Agg	Type	Description
calls in priority queue	hbase.ipc.queue.length	avg	Long	The size number of currently enqueued priority (internal house-keeping) requests. Hadoop:service=HBase,name=IPC,sub=IPC#numC
authorization successes	hbase.ipc.authorization.successes	sum	Long	Number of authorization successes. Hadoop:service=HBase,name=IPC,sub=IPC#autho
received bytes	hbase.ipc.bytesReceived	sum	Long	Number of bytes received. Hadoop:service=HBase,name=IPC,sub=IPC#receiv
sent bytes	hbase.ipc.bytesSent	sum	Long	Number of bytes sent. Hadoop:service=HBase,name=IPC,sub=IPC#sentByt

Metric				
Name	Key	Agg	Type	Description
authorization failures	hbase.ipc.authz.failures	Sum	Long	The number of authorization failures. Hadoop:service=HBase,name=IPC,sub=IPC#authorization failures
process call max time	hbase.ipc.processcall.maxtime	Max	Long	The maximum time taken by a process call. Hadoop:service=HBase,name=IPC,sub=IPC#ProcessCallMaxTime
calls in replication queue	hbase.ipc.replication.queue.calls	Avg	Long	The average number of calls in the replication queue. Hadoop:service=HBase,name=IPC,sub=IPC#numCallsInReplicationQueue
process calls	hbase.ipc.processcalls	Sum	Long	The number of process calls. Hadoop:service=HBase,name=IPC,sub=IPC#ProcessCalls
calls in general queue	hbase.ipc.queue.calls	Avg	Long	The average number of calls in the general queue. Hadoop:service=HBase,name=IPC,sub=IPC#numCallsInGeneralQueue

Metric				
Name	Key	Agg	Type	Description
queue call time	hbase.ipc.queue.call.time	Sum	Double	Hadoop calls service=HBase,name=IPC,sub=IPC#QueueCallTime_num_ops
queue call min time	hbase.ipc.queue.call.min.time	Min	Long	Hadoop calls service=HBase,name=IPC,sub=IPC#QueueCallTime_min_ops
queue call max time	hbase.ipc.queue.call.max.time	Max	Long	Hadoop calls service=HBase,name=IPC,sub=IPC#QueueCallTime_max_ops
queue size	hbase.ipc.queue.size	Avg	Long	Number of bytes in the call queues.Hadoop:service=HBase,name=IPC,sub=IPC#queue_size
authentication failures	hbase.rpc.authentication.failures	Sum	Long	Number of authentication failures.Hadoop:service=HBase,name=IPC,sub=IPC#authentication_failures
queue calls	hbase.ipc.queue.calls	Sum	Long	Hadoop calls service=HBase,name=IPC,sub=IPC#QueueCallTime_calls

Metric				
Name	Key	Agg	Type	Description
open con- nec- tions	hbase.ipc	avg	connections	Number of open connections at the RPC layer. Hadoop:service=HBase,name=IPC,sub=IPC#numOpenConnections
authentication suc- cesses	hbase.ipc	sum	authentication successes	Number of authentication successes. Hadoop:service=HBase,name=IPC,sub=IPC#authenticationSuccesses
total re- quests	hbase.regionserver	sum	requests	Total number of requests this RegionServer has answered. Hadoop:service=HBase,name=RegionServer,sub=Server#totalRequests
read re- quests	hbase.regionserver	sum	read requests	Number of read requests. Hadoop:service=HBase,name=RegionServer,sub=Server#readRequests

Metric				
Name	Key	Agg	Type	Description
write requests	hbase.regionserver.hbase.requests	Sum	Integer	Hadoop:service=HBase,name=RegionServer,sub=Server#v
applied ops	hbase.regionserver.hbase.applied	Sum	Integer	Hadoop:service=HBase,name=RegionServer,sub=Replicati
applied batches	hbase.regionserver.hbase.applied	Sum	Integer	Hadoop:service=HBase,name=RegionServer,sub=Replicati
balance min time	hbase.master.hbase.balance	Min	Double	Hadoop:service=HBase,name=Master,sub=Balancer#Bala
ops	hbase.master.hbase.ops	Avg	Integer	Hadoop:service=HBase,name=Master,sub=Balancer#Bala
time	hbase.master.hbase.balance	Sum	Double	Hadoop:service=HBase,name=Master,sub=Balancer#Bala
			*	
			Bal-	
			ancer-	
			Clus-	
			ter_mean	
misc in-vo-cations	hbase.master.hbase.misc	Sum	Integer	Hadoop:service=HBase,name=Master,sub=Balancer#misc
balance max time	hbase.master.hbase.balance	Max	Double	Hadoop:service=HBase,name=Master,sub=Balancer#Bala

Metric				
Name	Key	Agg	Type	Description
flushed cells	hbase.r	Sum	Long	Number of mob cells flushed to disk. Hadoop:service=HBase,name=RegionServer,sub=Server
scan cells size	hbase.r	Sum	Long	Total amount of scanned mob cells, in bytes. Hadoop:service=HBase,name=RegionServer,sub=Server
file cache hits	hbase.r	Avg	Float	Percentage of mob file cache hits. Hadoop:service=HBase,name=RegionServer,sub=Server
file caches	hbase.r	Avg	Long	Count of cached mob files. Hadoop:service=HBase,name=RegionServer,sub=Server

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Metric				
Name	Key	Agg	Type	Description
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compactmobcells	hbase.mob	Sum	Long	The number of cells moved to mob during compaction. Hadoop:service=HBase,name=RegionServer,sub=Server
filecacheaccesses	hbase.mob	Sum	Long	The count of accesses to the mob file cache. Hadoop:service=HBase,name=RegionServer,sub=Server
scanmobcells	hbase.mob	Sum	Long	The number of scanned mob cells. Hadoop:service=HBase,name=RegionServer,sub=Server
filecachemisses	hbase.mob	Sum	Long	The count of misses to the mob file cache. Hadoop:service=HBase,name=RegionServer,sub=Server

Metric	Name	Key	Agg	Type	Description
compactness	compactness	mob	Sum	Long	The number of cells moved from mob during compaction.
compactness	compactness	mob	Sum	Long	The number of cells moved into mob during compaction.

Metric				
Name	Key	Agg	Type	Description
compactmobcellsfromsize	hbase.mob	Sum	Long	The amount of cells moved from mob during compaction, in bytes.Hadoop:service=HBase,name=RegionServer,sub=Server
filecacheevictions	hbase.mob	Sum	Long	The number of items evicted from the mob file cache.Hadoop:service=HBase,name=RegionServer,sub=Server
flusheshbase.mob	hbase.mob	Sum	Long	The number of the flushes in mob-enabled stores.Hadoop:service=HBase,name=RegionServer,sub=Server

Metric				
Name	Key	Agg	Type	Description
flushed cells size	hbase.rmob.files.size	Sum	Long	The total amount of mob cells flushed to disk, in bytes.Hadoop:service=HBase,name=RegionServer,sub=Server
local files	hbase.rmob.files.local	Avg	Long	The percent of HFiles that are stored on the local hdfs data node.Hadoop:service=HBase,name=RegionServer,sub=Server
hlog files	hbase.rmob.files.hlog	Avg	Long	The number of write ahead logs not yet archived.Hadoop:service=HBase,name=RegionServer,sub=Server

Metric				
Name	Key	Agg	Type	Description
hlog files size	hbase.regionserver. hlog.size	Avg	Long	Size of all HLog Files.Hadoop:service=HBase,name=RegionServer,sub=Server
cluster re- quests	hbase.master. cluster.requests	Sum	Long	Hadoop:service=HBase,name=Master,sub=Server#cluster
dead re- gion servers	hbase.master. dead.servers	Avg	Double	Hadoop:service=HBase,name=Master,sub=Server#numDe
region servers	hbase.master. region.servers	Avg	Double	Hadoop:service=HBase,name=Master,sub=Server#numRe
average load	hbase.master. average.load	Avg	Double	Hadoop:service=HBase,name=Master,sub=Server#average
mutatio- n with- out wal	hbase.regionserver. mutations.without.wal	Sum	Long	Number of mu- ta- tions that have been sent by clients with the write ahead log- ging turned off.Hadoop:service=HBase,name=RegionServer,sub=Server

Metric				
Name	Key	Agg	Type	Description
mutatehbase.ops.failed	hbase.operations	sum	Long	Number of Check and Mutate calls that failed the checks.Hadoop:service=HBase,name=RegionServer,sub=Server
mutatehbase.ops.passed	hbase.operations	sum	Long	Number of Check and Mutate calls that passed the checks.Hadoop:service=HBase,name=RegionServer,sub=Server
mutatehbase.ops.withoutwal.size	hbase.operations	sum	Long	Size of data that has been sent by clients with the write ahead logging turned off.Hadoop:service=HBase,name=RegionServer,sub=Server

Metric				
Name	Key	Agg	Type	Description
hits	hbase.cache.hits	sum	long	Count of the hit on the block cache.Hadoop:service=HBase,name=RegionServer,sub=Server
expresshit%	hbase.cache.hit%	avg	float	The rate per-cent of the time that re-quests with the cache turned on hit the cache.Hadoop:service=HBase,name=RegionServer,sub=Server
hit%	hbase.cache.hit%	avg	float	Percent of block cache re-quests that are hits.Hadoop:service=HBase,name=RegionServer,sub=Server

Metric				
Name	Key	Agg	Type	Description
cache free size	hbase.cache.free.size	Avg	Long	Size of the block cache that is not occupied.Hadoop:service=HBase,name=RegionServer,sub=Server
block cache size	hbase.cache.size	Avg	Long	Size of the block cache.Hadoop:service=HBase,name=RegionServer,sub=Server
miss	hbase.cache.misses	Sum	Long	Number of re-quests for a block that missed the block cache.Hadoop:service=HBase,name=RegionServer,sub=Server
cache count	hbase.cache.count	Avg	Long	Number of block in the block cache.Hadoop:service=HBase,name=RegionServer,sub=Server

Metric				
Name	Key	Agg	Type	Description
evictions	hbase.cache.evictions	Count		Count of the number of blocks evicted from the block cache.Hadoop:service=HBase,name=RegionServer,sub=Server
shipped batches	hbase.replication.hadoopsent	Sum	Long	HBase,name=RegionServer,sub=Replication
shipped ops	hbase.replication.hadoopsent	Sum	Long	HBase,name=RegionServer,sub=Replication
log ed-its read	hbase.replication.hadoopsent	Sum	Long	HBase,name=RegionServer,sub=Replication
log queue	hbase.replication.hadoopsent	Sum	Long	HBase,name=RegionServer,sub=Replication
shipped bytes	hbase.replication.hadoopsent	Sum	Long	HBase,name=RegionServer,sub=Replication
log ed-its fil-tered	hbase.replication.hadoopsent	Sum	Long	HBase,name=RegionServer,sub=Replication
log read bytes	hbase.replication.hadoopsent	Sum	Long	HBase,name=RegionServer,sub=Replication

Metric				
Name	Key	Agg	Type	Description
hedge	hbase.stores.hedge	Sum	Long	The number of times we started a hedged read and a hedged read won.
hedge	hbase.stores.hedge	Sum	Long	The number of times we started a hedged read.

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Metric Name	Key	Agg	Type	Description
stores	hbase.stores	Avg	Long	
flushes	hbase.flushes	Sum	Long	
compactions	hbase.compactions	Sum	Long	
store files	hbase.store.files	Avg	Long	
store file index size	hbase.store.index.size	Avg	Long	
sync	hbase.fs.sync.latency.max	Max	Long	
read	hbase.fs.read.latency.max	Max	Long	
write	hbase.fs.write.latency.max	Max	Long	
sync	hbase.fs.sync.latency.min	Min	Long	

Metric Name	Key	Agg	Type	Description
read	hbase.fs.read.latency.min	Min	Long	
write	hbase.fs.write.latency.min	Min	Long	
flush queue	hbase.flushes.queue.size	Avg	Double	
max	hbase.memstore.flushes.time.max	Max	Long	
min	hbase.flushes.size.min	Min	Long	
flushes	hbase.memstore.flushes	Sum	Long	
max	hbase.flushes.size.max	Max	Long	
memstore size	hbase.memstore.size	Avg	Long	
min	hbase.memstore.flushes.time.min	Min	Long	
min	hbase.compactions.time.min	Min	Long	
max	hbase.compactions.time.max	Max	Long	
max	hbase.compactions.size.max	Max	Long	
compactions	hbase.compactions	Sum	Long	
compaction queue	hbase.compactions.queue.size	Avg	Double	
min	hbase.compactions.size.min	Min	Long	
cache size	hbase.cache.block.size	Avg	Long	
miss count	hbase.cache.block.misses	Sum	Long	
cache free	hbase.cache.block.free	Avg	Long	
hit count	hbase.cache.block.hits	Sum	Long	
block cache count	hbase.cache.block.count	Avg	Long	
blockCacheHitRatio	hbase.cache.block.hits.ratio	Avg	Long	
evicted count	hbase.cache.block.evictions	Sum	Long	
blockCacheHitCachingRatio	hbase.cache.block.caching.hits.ratio	Avg	Long	
max	hbase.splits.time.max	Max	Long	
splits	hbase.splits	Sum	Long	
max	hbase.splits.size.max	Max	Long	
min	hbase.splits.size.min	Min	Long	
splits	hbase.splits	Sum	Long	
regions	hbase.regions	Avg	Long	