

Hortonworks Data Platform

HDP-2.2.0 Release Notes

(Dec 2, 2014)

Hortonworks Data Platform: HDP-2.2.0 Release Notes

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1. HDP 2.2.0 Release Notes

This document provides you with the latest information about the HDP 2.2.0 release and its product documentation.

Component Versions

All HDP 2.2 components listed here are official Apache releases of the most recent stable versions available. Hortonworks' philosophy is to provide patches only when absolutely necessary to assure the interoperability of the components. Unless you are explicitly directed by Hortonworks Support to take a patch update, each of the HDP 2.2 components needs to remain at the following package version levels to ensure a certified and supported copy of HDP 2.2.

Official Apache versions for HDP 2.2.0.

- Apache Hadoop 2.6.0
- Apache Accumulo 1.6.1
- Apache Ranger 0.4.0
- Apache DataFu 1.2.0
- Apache Falcon 0.6.0
- Apache Flume 1.5.2
- Apache HBase 0.98.4
- Apache Hive 0.14.0
- Hue 2.6.1
- Apache Kafka 0.8.1.1
- Apache Knox 0.5.0
- Apache Mahout 0.9.0
- Apache Oozie 4.1.0
- Apache Pig 0.14.0
- Apache Phoenix 4.2.0
- Apache Sqoop 1.4.5
- Apache Slider 0.60.0
- Apache Tez 0.5.2
- Apache Storm 0.9.3

- Apache Zookeeper 3.4.6

As of HDP 2.2 the following third-party tools are deprecated and will be removed in a future release:

- Ganglia 3.5.0
- Nagios 3.5.0
- Ganglia Web 3.5.7

1.1. Unsupported Apache Features

This section highlights several new features in HDP 2.2.0.

- In HDP 2.2.0, Spark 1.4.1 is now available as a certified component.
 - Support for Optimized Row Columnar (ORC) files
 - ML Pipeline API in PySpark ([SPARK-3530](#))
- Support for Ubuntu 12.0.4 and Ubuntu 14.0.4
- Support for Debian 6 and Debian 7

1.2. Unsupported Features

The following features are shipped as part of HDP 2.2 HDFS, but are not supported:

- NameNode Federation ([HDFS-1052](#))
- viewFS ([HADOOP-7257](#))

The following Apache Components are shipped as part of HDP 2.2 YARN, but are not supported:

- Fair Scheduler
- MapReduce Uber AM
- MapReduce Eclipse Plug-in

The following Apache Component is shipped as part of HDP 2.2 Kafka, but is not supported:

- Delete Topic

1.3. Behavioral Changes

Behavioral changes denote a marked change in the code from the previously released version to this version of HDP 2.2. Review all behavioral changes for a component to ensure that you are aware of how components have changed in this release.

1.3.1. HDFS Behavioral Changes

[HDFS-6376](#) distcp can copy data between HA clusters. You can use the new configuration property `dfs.internal.nameservices` to explicitly specify the name services belonging to the local cluster, while continue using the configuration property `dfs.nameservices` to specify all the name services in the local and remote clusters.

For example, if you perform distcp between two clusters, for example c1 and c2 and both of which run in the HA mode, make the following configuration changes on the cluster that runs the distcp job:

1. Set `dfs.nameservices` to both c1 and c2.
2. Modify the configuration to include the settings for both clusters. See the comments in [HDFS-6376](#) for more details.
3. Set `dfs.internal.nameservice` to the nameservice id that corresponds to the cluster that runs the distcp job.

1.3.2. Hive Behavioral Changes

[HIVE-7397](#) Hive has changed the following default settings:

```
hive.fetch.task.conversion - from 'minimal' to 'more'
hive.fetch.task.conversion.threshold - from '-1' to '1073741824' (1 GiB)
```

For example, queries such as:

```
select * from foo_table limit 1;
```

which would previously have executed without a MapReduce stage to now require a MapReduce stage. The change to these settings allows more types of queries to be evaluated locally, including queries with "where" clauses. The threshold is applied to the input size of the query (raw table size). Because 'more' allows filtered queries, it's prudent to set a limit on the input size.

[HIVE-6432](#): Hive 0.14 removes all `org.apache.hcatalog.*` classes in favor of `org.apache.hive.hcatalog.*` classes.

The following previously deprecated features were also removed in this release as part of this change:

- `HdfsAuthorizationProvider` - the `HiveStorageBasedAuthorizationProvider` replaces it.
- `HBaseHCatStorageHandler` - Hive's native `HBaseStorageHandler` is now directly usable from `HCatalog`.

[HIVE-6455](#) If you store Hive data in a columnar format, such as ORC, verify that the `hive.optimize.sort.dynamic.partition` property is set to true. It was the default value for Hive 0.13.x, but is now disabled by default in Hive 0.14.x. Enabling dynamic partitions improves Hive performance when using columnar formats.

```
<property>
  <name>hive.optimize.sort.dynamic.partition</name>
  <value>true</value>
</property>
```

([HIVE-5940](#), [HIVE-6252](#)) Added SHOW GRANT and SHOW ROLE GRANT. Users will be able to list only their own privileges on a table/role unless they are in an admin role. For grant/revoke statements, if a user is granted a privilege WITH GRANT OPTION on a table or view, then the user can also grant that privilege other users.

[HIVE-6972](#) The JDBC URI for HiveServer2 has the form:

```
jdbc:hive2://<host1>:<port1>,<host2>:<port2>/dbName;sess_var_list?
hive_conf_list#hive_var_list
```

Ideally, sess_var_list is supposed to be used to pass parameters that will be used within the JDBC Driver. However, some of the http mode parameters were being passed in the hive_conf_list which is fixed now (in a backward-compatible way).

Additionally, JDBC Driver has a naming convention for the parameters in the JDBC URI which were not followed to the sasl.qop parameter. It is renamed it in a backward compatible way.

- HTTP Mode parameters have changed. As you can see in the following examples, hive.server2.transport.mode has been renamed to transportMode, hive.server2.thrift.http.path has been renamed to httpPath and both have been moved from hive_conf_list to sess_var_list.
 - Old example URI: jdbc:hive2://<host>:<port>/<db>;user=<username>;password=<password>;hive.server2.transport.mode=http;hive.server2.thrift.http.path=<http_endpoint>
 - New example URI: jdbc:hive2://<host>:<port>/<db>;user=<username>;password=<password>;transportMode=http;httpPath=<http_endpoint>;hive.server2.logging.operation.enabled=false
- Sasl qop renamed to saslQop:
 - Old example URI: jdbc:hive2://<host>:<port>/<db>;principal=<hiveserver2_kerberos_principal>;sasl.qop=<qop_value>
 - New example URI: jdbc:hive2://<host>:<port>/<db>;principal=<hiveserver2_kerberos_principal>;saslQop=<qop_value>

All changes are backward-compatible and print a deprecation warning message like the following:

```
0: jdbc:hive2://localhost:10007> !connect
jdbc:hive2://localhost:10007/;sasl.qop=auth?hive.server2.transport.mode=h
ttp;hive.server2.thrift.http.path=cliservice user user
org.apache.hive.jdbc.HiveDriver
Connecting to
jdbc:hive2://localhost:10007/;sasl.qop=auth?hive.server2.transport.mode=h
ttp;hive.server2.thrift.http.path=cliservice
```

```
14/10/07 16:22:24 INFO jdbc.Utills: Supplied authorities: localhost:10007
14/10/07 16:22:24 WARN jdbc.Utills: ***** JDBC param deprecation *****
14/10/07 16:22:24 WARN jdbc.Utills: The use of sasl.qop is deprecated.
14/10/07 16:22:24 WARN jdbc.Utills: Please use saslQop like so:
jdbc:hive2://<host>:<port>/dbName;saslQop=<qop_value>
14/10/07 16:22:24 WARN jdbc.Utills: ***** JDBC param deprecation *****
14/10/07 16:22:24 WARN jdbc.Utills: The use of hive.server2.transport.mode
is deprecated.
14/10/07 16:22:24 WARN jdbc.Utills: Please use transportMode like so:
jdbc:hive2://<host>:<port>/dbName;transportMode=<transport_mode_value>
14/10/07 16:22:24 WARN jdbc.Utills: ***** JDBC param deprecation *****
14/10/07 16:22:24 WARN jdbc.Utills: The use of
hive.server2.thrift.http.path is deprecated.
14/10/07 16:22:24 WARN jdbc.Utills: Please use httpPath like so:
jdbc:hive2://<host>:<port>/dbName/httpPath=<http_path_value>
Connected to: Apache Hive (version 0.14.0-SNAPSHOT)
Driver: Hive JDBC (version 0.14.0-SNAPSHOT)
Transaction isolation: TRANSACTION_REPEATABLE_READ
```

Be aware that `org.apache.hcatalog.pig.HCatLoader` was deprecated in Hive 0.13.x and removed in Hive 0.14.x. You must now use `org.apache.hive.hcatalog.pig.HCatLoader`.

1.3.3. Hue Behavioral Changes

The Hue Hive App, also known as Beeswax, no longer uses the Beeswax server. The Hue Hive App now integrates directly with HiveServer2.

1.3.4. Oozie Behavioral Changes

The Oozie system environment must have JDK 1.6 or higher. And on the machine where you the run oozie command line, set `$JAVA_HOME` to a java version of 1.6 or higher.

Calling `log4j` has changed in Oozie for HDP 2.2. If you are using custom configurations or Ambari to install, add the following line to `oozie-log4j.properties`:

```
log4j.appender.oozie.layout.ConversionPattern=%d{ISO8601} %5p %c{1}:%L -
SERVER[${oozie.instance.id}] %m%n
```

where `${oozie.instance.id}` is determined by oozie, automatically.

1.3.5. Pig Behavioral Changes

Be aware that `org.apache.hcatalog.pig.HCatLoader` was deprecated in Hive 0.13.x and removed in Hive 0.14.x. You must now use `org.apache.hive.hcatalog.pig.HCatLoader`.

1.4. Tech Previews in This Release

All HDP 2.2 components listed here are official Apache releases of the most recent stable versions available. Hortonworks' philosophy is to provide patches only when absolutely necessary to assure the interoperability of the components. Unless you are explicitly directed by Hortonworks Support to take a patch update, each of the HDP 2.2 components needs to remain at the following package version levels to ensure a certified and supported copy of HDP 2.2.

- HDFS Encryption
- HDFS read/write storage tier
- [HDFS-6932](#) HDFS Blocking Mover/Balancer from moving files/blocks to/from transient storage.
- Falcon Data Lineage
- Falcon Graph View of Dependencies
- Phoenix support for local secondary indexes
- Spark 1.2.0 on YARN
- YARN support for Docker

1.5. What's New in this Release

HDP 2.2 includes the following new features:

- Accumulo
 - Accumulo multi-datacenter replication
 - Accumulo on YARN via Slider
- Falcon
 - Authorization
 - Lineage Enhancement
 - HCat Replication / Retention
 - Archive to Cloud
- Flume
 - Flume streaming to Hive for secure and unsecure clusters

- HBase
 - HBase HA: Timeline-consistent replicas with realtime replication
 - HBase block cache compression
 - HBase on YARN via Slider
- HDFS
 - Heterogenous Storage: Support for SSD Tier
 - Heterogenous Storage: Support for Archival Tier
 - Operating secure DataNode without requiring root access
 - AES support for faster wire encryption
- Hive
 - Support for SQL Transactions with ACID semantics
 - Support for SQL Temporary Tables
 - Better optimize queries using Cost Based Optimizer
 - Add performance improvements for various queries
 - Security additions such as Grant, Revoke with a choice of using Native Security or Ranger security with both integrated completely in Hive
- Knox
 - Support for HDFS HA
 - Installation and configuration with Apache Ambari
 - Service-level authorization with Apache Ranger
 - YARN REST API access
- Oozie
 - Oozie HA on secure clusters
- Phoenix
 - Subquery support
 - Robust secondary indexes
 - Build secondary index during bulk import
- Pig
 - Pig on Tez

- Including DataFu for use with Pig
- Ranger
 - Storm Authorization and Auditing
 - Knox Authorization and Auditing
 - Deeper integration with HDP stack: Hive Auth API support for grant/revoke commands, grant/revoke commands in HBase, and Windows support
 - REST API's for policy manager, local audit log storage in HDFS, and support for Oracle DB for policy store and audits
- Sqoop
 - Support for all Hive types via HCatalog import/export
 - Support for multiple partition keys
 - Integration with Hadoop Credential Management Framework
- Storm
 - Storm clusters can now be provisioned via Ambari
 - Storm can now run on YARN based clusters using Apache Slider
 - Storm now supports kerberos based authentication and pluggable authorization
 - Pre-built Spouts for JMS, HBase lookups and Bolts for Kafka, Hive.
 - Real-time visualization of running topologies and its associated metrics
 - REST APIs for topology stats
- Tez
 - Tez Debug Tooling & UI
- YARN
 - Support long running services: handling of logs, containers not killed when AM dies, secure token renewal, YARN Labels for tagging nodes for specific workloads
 - Support for CPU Scheduling and CPU Resource Isolation through CGroups
 - Work-preserving restarts of ResourceManager and NodeManager
 - Support node labels during scheduling
 - Global, shared cache for application artifacts
 - REST API for YARN application submission and termination

- Application Timeline Server is supported in a Secure (Kerberized) cluster

1.6. Fixed Issues

Fixed issues represents selected issues that were previously logged via Hortonworks Support, but are now addressed in the current release. These issues may have been reported in previous versions within the Known Issues section; meaning they were reported by customers or identified by Hortonworks Quality Engineering team.

Key	Apache JIRA	Summary
BUG-10529	HIVE-4627	Add support for total ordering of output
BUG-10941	TEZ-645 TEZ-646 TEZ-776	GRIDMIX000000 got final Status KILLED with container reuse disabled - AM OOM
BUG-11102	YARN-1445	[YARN-1445] Separate FINISHING and FINISHED state in YarnApplicationState
BUG-12327	YARN-90	[Yarn-90] NM cannot detect when bad disks become healthy again.
BUG-12398	HBASE-10817 HBASE-10818	Create bulkload integration Test with replica option
BUG-12650	FALCON-303	Falcon API changes required for Mirroring UI
BUG-12699	HDFS-573	libHDFS native library for Windows
BUG-13215	HBASE-9445	HBase Snapshot Input Format IT Cannot Run with Default Number of Regions
BUG-14013	HIVE-6507	hcatalog should automatically work with new tableproperties in ORC
BUG-14645	HDFS-6678	MiniDFSCluster leaves CacheReplicationMonitor thread running causing heap thrashing and eventual failure of Oozie unittests
BUG-14846	FLUME-1734	Hive Sink Unit test needs a way to interact with Hive and check streamed data
BUG-14969	HIVE-6549	remove hcatalog/bin/hive-config.sh
BUG-15077	PHOENIX-1072	sqlline.py: On failed connection, continues to run in the background
BUG-15109	HDFS-2882 HDFS-4211	HDFS-2882: Receiving NPE Errors when starting datanode due to a mount not being accessible
BUG-15413	TEZ-1027	Recovery Information does not get stored at tez.staging-dir with session on
BUG-15466	HBASE-10785	HBase Bloomberg HA Replica Integration Test get/mutli-get fails
BUG-15613	YARN-1885	[YARN-1885] yarn logs command did not provide logs for all containers across all attempts
BUG-15733	HIVE-7071	Schema evolution is broken on Tez

Key	Apache JIRA	Summary
BUG-15796	HADOOP-10522 HADOOP-10527	sigsegv in mapred history server due to segfault in JniBasedUnixGroupsMapping
BUG-15881	HIVE-7579	Error messaging for different authorization failures is not informative
BUG-15988	PIG-3989	Need a way to pass PIG_OPTS to Hadoop for all Hadoop versions
BUG-16257	HBASE-10123	Hbase master fails to start due to BindException
BUG-16279	HIVE-8203	Valid transaction list acquired before locks in Driver.java
BUG-16281	HIVE-8258	Cleaner needs to track readers reading its files rather than acquire a lock
BUG-16293	HADOOP-10472	KerberosAuthenticator writes security logs on the client
BUG-16512	TEZ-1033	[TEZ-1033] AM hangs during recovery with Awaiting init event
BUG-16566	YARN-2016	Yarn getApplicationRequest start time range is not honored
BUG-16596	HIVE-6626	Hive does not expand the DOWNLOADED_RESOURCES_DIR path
BUG-16609	TEZ-1044	Need to consider map/reduce java.opts values for container reuse
BUG-16650	MAPREDUCE-5831	[MAPREDUCE-5831] Old MR client is not compatible with new MR application
BUG-16795	HADOOP-10503	update junit dependency for all components to 4.11
BUG-16829	YARN-1976	[YARN-1976] Tracking url missing http protocol for FAILED application
BUG-16862	YARN-1922	Process group remains alive after container process is killed externally
BUG-16908	YARN-920	YARN RM shows one running app but a node shows its running more than one
BUG-16913	HDFS-6715	[HDFS-6715] webhdfs wont fail over when it gets java.io.IOException: Namenode is in startup mode
BUG-16918	HIVE-7342	SQL std auth - should be possible to configure it using hive configuration files alone
BUG-16985	HADOOP-10508	EBay Code Review - Please review and commit HADOOP-10508
BUG-17034	YARN-1250	[YARN-1250] Add ACLs manager of the generic history
BUG-17105	YARN-2269	External links needs to be removed from YARN UI
BUG-17231	HIVE-7250	Problems loading wide tables into ORC
BUG-17238	FALCON-229	Enable SSL for Falcon REST API
BUG-17307	HIVE-7533	support SQL std authz from hive cli
BUG-17521	HIVE-7052	Optimizing tez split calculation time

Key	Apache JIRA	Summary
BUG-17533	FALCON-434	champlain CI: falcon doesn't compile with hive trunk
BUG-17710	HBASE-11149	Wire encryption is broken
BUG-17787	TEZ-1240	Tracking jira for Tez diagnostic message improvement.
BUG-17871	TEZ-1032 TEZ-1205	allow specifying tasks/vertices to be profiled
BUG-17884	YARN-1104	[YARN-1104] NMs to support rolling logs of stdout & stderr
BUG-17902	PIG-3949	Pig compilation Failure - Champlain
BUG-17939	TEZ-1024 TEZ-1470	Hive on tez job failed as it never finished
BUG-18018	YARN-1338	[YARN-1338] [Review] Recover localized resource cache state upon nodemanager restart
BUG-18138	AMBARI-7098	ipc.server.tcpcnodelay should be enabled by default
BUG-18146	TEZ-657	Tez should not consider tasks running in pre-empted containers to have failed
BUG-18256	HADOOP-9888	Apache HADOOP-9888 KerberosName static initialization gets default realm, which causes big slow-down in non-secure deployment.
BUG-18257	HDFS-6455	NFS: Exception should be added in NFS log for invalid separator in allowed.hosts (HDFS-6455)
BUG-18437	TEZ-1160	[TEZ-1160] Allow users to set non-tez configs on client side
BUG-18662	YARN-1339	[YARN-1339] Code review for recovering DeletionService state in NodeManager Restart
BUG-18704	HDFS-6581	Support memory as storage tier
BUG-18711	HDFS-2856	HDFS DataNode must not require to be started as ROOT (HDFS-2856)
BUG-18714	AMBARI-7126 AMBARI-7615	Ambari support for DataNode no longer running as root.
BUG-18849	MAHOUT-1589 MAHOUT-1590	champlain mahout auto merge is broken
BUG-18923	TEZ-1387	BUG-17787 Insufficient diagnostics/ error messages when jobs fail on a badly setup cluster
BUG-18933	HIVE-7219	upload/checkin unrolling code
BUG-18934	HIVE-7231	fix stripe padding (64M - 256M blocks)
BUG-19015	FALCON-482	Concurrently update/delete a process fails in falcon
BUG-19019	YARN-2167	[YARN-2167] LevelDbIterator should get closed in NMLevelDbStateStoreService#loadLocalizationState() within finally block

Key	Apache JIRA	Summary
BUG-19033	HIVE-7324	Unit test framework addition to allow import of metadata/explain only queries
BUG-19109	PIG-4019	champlain pig compile is broken -
BUG-19111	YARN-2173	[YARN-2173] Enabling HTTPS for the reader REST APIs of TimelineServer
BUG-19112	YARN-2174	[YARN-2174] Enabling HTTPS for the writer REST API of TimelineServer
BUG-19113	YARN-2102	[YARN-2102] More generalized timeline ACLs
BUG-19114	MAPREDUCE-5858	[MAPREDUCE-5858] MR should make use of the timeline server
BUG-19116	MAPREDUCE-5933	BUG-17687 [Review] [MAPREDUCE-5933] Enable MR AM to post history events to the timeline server
BUG-19235	YARN-611	[YARN-611] Add an AM retry count reset window to YARN RM
BUG-19268	HDFS-6689	NFS: can't access file under directory with 711 access right as other user
BUG-19284	TEZ-1223	At large scale (10 TB), shuffle throws errors "Encoded byte size for String was -30, which is outside of 0..1000 range."
BUG-19324	TEZ-1080	Configuration for Intermediate Inputs and Outputs
BUG-19326	TEZ-1209	Add Javadoc for Tez APIs
BUG-19328	TEZ-857	Separate user facing and framework facing interfaces on Tez runtime
BUG-19417	PIG-4218	Pig OrcStorage fail to load a map with null key
BUG-19428	YARN-614	[YARN-614] Retry attempts automatically for hardware failures or YARN issues and set default app retries to 1
BUG-19496	YARN-2208	BUG-17882 [YARN-2208] AMRMTokenManager need to have a way to roll over AMRMToken
BUG-19607	YARN-2228	[YARN-2228] TimelineServer should load pseudo authentication filter when authentication = simple
BUG-19645	YARN-2247	[YARN-2247] Add support for authentication for RM web services using delegation tokens
BUG-19731	YARN-2211	BUG-17882 [YARN-2211]RMStateStore needs to save AMRMToken master key for recovery when RM restart/failover happens
BUG-19732	YARN-2212	BUG-17882 [YARN-2212]ApplicationMaster needs to find a way to update the AMRMToken periodically
BUG-19733	YARN-2237	BUG-17882 [YARN-2237]MRAppMaster changes for AMRMToken roll-up
BUG-19880	TEZ-1238	Display more clear diagnostics info on client side if missing jar in

Key	Apache JIRA	Summary
		LocalResource or Exception happen in Processor
BUG-19884	YARN-2045	[YARN-2045] Versioning NMStateStore for Rolling Upgrade
BUG-19885	MAPREDUCE-5963	[MAPREDUCE-5963]Make ShuffleHandler state versioning in rolling upgrade
BUG-19999	HDFS-6570	add api that enables checking if a user has certain permissions on a file
BUG-20046	HBASE-11940	Provide snapshot-all and restore-all scripts to support rolling upgrade
BUG-20065	YARN-2288	[YARN-2288] LeveldbTimelineStore should be versioned for rolling upgrade
BUG-20082	HADOOP-7657	Included support for LZ4 compression in Hadoop
BUG-20143	AMBARI-7894	Change Ambari Tez Runtime configs post TEZ-1272
BUG-20173	HIVE-6928	Beeline truncates output rows longer than 170 characters
BUG-20184	HADOOP-8069	Have the tcpnodelay flag set to true in the hadoop configurations?
BUG-20202	YARN-2298	[YARN-2298] Move TimelineClient to yarn-common
BUG-20246	YARN-2302	[YARN-2302] Refactor TimelineWebServices
BUG-20258	YARN-668	[YARN-668] TokenIdentifier serialization should consider unknown fields for future extension
BUG-20283	FALCON-466	REST APIs must add the entity owner as an implicit filter
BUG-20294	FALCON-166 FALCON-474 FALCON-591 FALCON-640	Add Bulk APIs to drive the dashboard needs
BUG-20295	FALCON-469	Add ability to filter by tags in REST API
BUG-20296	STORM-361	Add JSON-P support to Storm UI API STORM-361
BUG-20297	STORM-349	(Security) ui actions should have nimbus like authroization - STORM-349
BUG-20298	STORM-347	authentication should allow for groups not just users STORM-347
BUG-20299	KAFKA-1483	Split Brain about Leader Partitions KAFKA-1483
BUG-20301	KAFKA-1070	Auto-assign node id KAFKA-1070
BUG-20302	STORM-346	(Security) Oozie style delegation tokens for HDFS/HBase STORM-346
BUG-20372	HIVE-7297	org.apache.hadoop.hive.ql.WindowsPathUtil is not easy to be reused across different hive projects
BUG-20374	HIVE-7295	automatically set ownership of new files/dirs to Administrators group instead of individual user

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BUG-20386	KAFKA-1483	Using GetOffsetShell against non-existent topic creates the topic unintentionally KAFKA-1507
BUG-20395	HIVE-7472	Support for additional filetypes in webhcat java client api
BUG-20424	HIVE-7616	Use cardinality estimate for hive.hashtable.initialCapacity instead of using nextHighestPowerOfTwo(100000)
BUG-20467	YARN-2347	[YARN-2347]Consolidate RMStateVersion and NMDBSchemaVersion into StateVersion
BUG-20590	YARN-2505	[YARN-2505] Support get/set hard node labels using RM REST API
BUG-20697	HIVE-7620	Hive metastore fails to start in secure mode due to "java.lang.NoSuchFieldError: SASL_PROPS" error
BUG-20699	SLIDER-267	Slider AM web UI should give a link to show AM logs
BUG-20718	TEZ-978	Enhance auto parallelism tuning for queries having empty outputs or data skewness
BUG-20730	FLUME-2491	test_Basic failed with org.apache.flume.FlumeException: Unable to load sink type: org.apache.flume.sink.solr.morphline.MorphlineSolrSink, class: org.apache.flume.sink.solr.morphline.MorphlineSolrSink
BUG-20738	HDFS-6898	HDFS Fails to write 1replica data when local disks fill up
BUG-20769	HDFS-6836	HDFS INFO logging is verbose & uses file appenders
BUG-20921	HIVE-8279	drop table proceeds without authorization check if "db.table" syntax is used
BUG-20978	HBASE-11574 HBASE-12317 HBASE-12335	Integration test class IntegrationTestRegionReplicaPerf fails complaining about region replication enabled performance not being as fast enough as without replication
BUG-21033	HDFS-6830	NameNode must handle block migration between storages on the same DN
BUG-21049	HIVE-7648	HiveAuthorizer.checkPrivileges(hiveOpType=SWITCHDATABASE): parameters should include database name
BUG-21050	HIVE-7648	HiveAuthorizer.checkPrivileges(hiveOpType=CREATEDATABASE): parameters should include database name/table name respectively
BUG-21051	HIVE-7648	HiveAuthorizer.checkPrivileges(hiveOpType=DROPINDEX): parameters should include database name and table name
BUG-21172	HDFS-6376	Distcp data between two HA clusters fail with error

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BUG-21222	YARN-1506	[YARN-1506]Replace set resource change on RMNode/SchedulerNode directly with event notification.
BUG-21241	HADOOP-10966	Hadoop build Failure on Windows platform only.
BUG-21253	HIVE-8687	Pig throws java.lang.ClassCastException when storing into Avro partitioned table with HCatLoader.
BUG-21357	HBASE-12052	CsvBulkLoadTool gets blocked if executed with hrt_qa user
BUG-21372	YARN-2426	[HDFS-6904] ResourceManger is not able renew WebHDFS token when application submitted by Yarn WebService
BUG-21377	YARN-2425	[YARN-2425] When Application submitted by via Yarn RM WS, log aggregation does not happens
BUG-21413	MAPREDUCE-5891	[MAPREDUCE-5891] Improved shuffle error handling across NM restarts
BUG-21419	SLIDER-334	slider compilation failure
BUG-21520	FALCON-598	ProcessHelper throws NPE if the process has no inputs OR no outputs defined
BUG-21620	HIVE-4629 HIVE-7615	Beeline should show HS2 logs
BUG-21671	YARN-2182	Container Id format gets changed after work preserving rm restart
BUG-21674	YARN-2538	BUG-17882 [YARN-2538]Add logs when new AMRMTOKEN arrives.
BUG-21692	YARN-2446	[YARN-2446] Using TimelineNamespace to shield the entities of a user
BUG-21693	YARN-2449	[YARN-2449] Regression after YARN-2397 for timeline server
BUG-21709	HADOOP-10995	[HADOOP-10995] HBase cannot run correctly with Hadoop trunk
BUG-21756	MAPREDUCE-6052	[MAPREDUCE-6052] Support overriding log4j.properties per job
BUG-21798	HBASE-11886	Regression: In case of secured cluster, user with only 'C' create permission was able to insert new data prior to Champlain, but not anymore in Champlain
BUG-21850	HIVE-7695	incorrect count(*) results after insert appending data
BUG-21859	HIVE-5775	Clone hive cbo branch in hwx github repo
BUG-21985	YARN-2468	BUG-12006 [YARN-2468] Log handling for LRS
BUG-22008	YARN-2459	[YARN-2459] ResourceManager receives FATAL "org.apache.hadoop.yarn.server.resourcemanager.ResourceManager Received a

Key	Apache JIRA	Summary
		org.apache.hadoop.yarn.server.resourcemanager.RMFatalEv of type STATE_STORE_OP_FAILED."
BUG-22037	HIVE-7971	Not able to update decimal type on partitioned data in Hive 13
BUG-22081	TEZ-1536	Tez - There's a typo in the code, it has 'configuration' spelled wrong in the error message.
BUG-22111	TEZ-1494	[TEZ-1494] DAG hangs waiting for ShuffleManager.getNextInput()
BUG-22113	TEZ-978	[TEZ-978] Enhance auto parallelism tuning for queries having empty outputs or data skewness
BUG-22115	TEZ-1540	[TEZ-1540] [Umbrella] Handle parallelism updates and versioning w/ custom InputInitializerEvents
BUG-22116	TEZ-1157	[TEZ-1157] Optimize broadcast :- Tasks pertaining to same job in same machine should not download multiple copies of broadcast data
BUG-22148	HBASE-11973	Mapreduce job cannot commit due to FileNotFoundException of container_token
BUG-22175	HIVE-7950 HIVE-7984	AccumuloStorageHandler doesn't work with Hive on Tez
BUG-22195	HBASE-11974	In Champlain when a disabled table is being copied, it throws NotServingRegionException instead of TableNotEnabledException
BUG-22197	HADOOP-11063	KMS breaks all champlain windows installs
BUG-22213	FALCON-669	Falcon should have a default value for workflow.execution.listeners configuration
BUG-22222	HDFS-6996	Snapshot diff report has IndexOutOfBoundsException.
BUG-22233	HDFS-6981	Support DN layout changes with rolling upgrade
BUG-22267	HDFS-6998	Windows: warning message 'ssl.client.truststore.location has not been set' gets printed for hftp command
BUG-22281	HBASE-12056	IntegrationTestRegionReplicaReplication fails
BUG-22290	HBASE-11903	test_ReplicaSplitTable fails as the expected replica number after compaction is not the same as actual replica number
BUG-22297	YARN-2515	Tez task fails to find correct container in HA configuration
BUG-22303	HBASE-12055 HBASE-12074	BUG-22192 Windows Hbase Unit Test Failures
BUG-22312	TEZ-1549	Windows Tez Unit Test Failure
BUG-22317	FALCON-728	Linux Falcon Unit Test Failures

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BUG-22395	PIG-4157	Pig compilation failure due to HIVE-7208
BUG-22418	HBASE-12099	copyTable tests fail with error java.lang.NoSuchMethodError
BUG-22442	YARN-2758	BUG-22334 [YARN-2758] Unit test failures in TestApplicationHistoryService in Champlain builds
BUG-22451	PIG-4156	Null pointer exception in PIG when executing a script remotely on Linux
BUG-22528	HIVE-8052	Vectorization: min() on TimeStamp datatype fails with error "Vector aggregate not implemented: min for type: TIMESTAMP"
BUG-22532	PIG-4141	Orc tests failed with '/hive-common-jar' does not exist.
BUG-22551	HIVE-8045	External table creation fails when metastore.authorization is set to use MetaStoreAuthzAPIAuthorizerEmbedOnly and sql std auth is enabled from hive-site.xml
BUG-22562	HDFS-7073	Inter Cluster Distcp fails
BUG-22564	STORM-10 STORM-490 STORM-9	Storm Misc issues on Windows
BUG-22601	HBASE-11972	Hbase secure model is not working
BUG-22602	YARN-2529	[YARN-2529] Generic history service RPC interface doesn't work when service authorization is enabled
BUG-22603	HBASE-12099	BUG-22192 TestScannerModel fails consistently
BUG-22635	YARN-2464	[YARN-2464] Provide Hadoop as a local resource (on HDFS) which can be used by other projects
BUG-22646	SLIDER-184	Slider support for an HA enabled Cluster
BUG-22664	HIVE-8045	add jar, dfs fails from hive cli when hive.security.authorization.manager is set to org.apache.hadoop.hive.ql.security.authorization.plugin.sqlstd in hive-site.xml
BUG-22665	HIVE-8221	Webhcat tests for restricted permissions failing
BUG-22668	FALCON-740	Scheduled feed or process cannot be deleted
BUG-22761	HIVE-8257	WebHcat component showing NoSuchMethodError: TextClientRMProxy.getRMDelegationTokenService(Configuration)
BUG-22810	HIVE-8062	Stats collection for columns fails on a partitioned table with null values in partitioning column
BUG-22819	MAPREDUCE-5891 TEZ-1637	Improved shuffle error handling across NM restarts

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BUG-22849	SQOOP-1519	Sqoop: hive-import and Hbase import fails with – direct option - with oraoop
BUG-22864	ACCUMULO-3145	ShellServerIT-listscans fails on secure cluster because it Could not find any active scans over table listscans
BUG-22869	ACCUMULO-3144	test.AuditMessageIT-testUserOperationsAudits fails on secure cluster with unexpected value at assertion
BUG-22879	HIVE-8107	BUG-22878 Improve error msg for UPDATE of invalid table
BUG-22880	HIVE-8105	BUG-22878 add support NULL literal in INSERT VALUES statement
BUG-22882	HIVE-8191	BUG-22878 attempt to insert/update/delete a non acid table should raise an error
BUG-22883	HIVE-8104	BUG-22878 INSERT VALUES statement runs in vectorized mode NPEs
BUG-22886	HIVE-7877	BUG-22878 Insert/values with negative values causes a parse exception
BUG-22891	TEZ-1575	[TEZ-1575]Add MR settings support to MRRSleep
BUG-22902	HIVE-8078	ORC Delta encoding corrupts data when delta overflows long
BUG-22911	YARN-2563	[YARN-2563] Oozie jobs are failing with authentication errors
BUG-22933	PIG-4170	Multiquery with different type of key gives wrong result
BUG-22939	TEZ-1585	Investigate: Memory leak in session mode
BUG-22962	TEZ-1634	Tez job via fails with Caused by: java.io.IOException: Exceeded MAX_FAILED_UNIQUE_FETCHES
BUG-22964	PIG-4176	Bloom_* fails on Pig on Tez with File Not found exception
BUG-22968	SLIDER-430	Slider registry should give better error message on missing command
BUG-22997	PIG-4184	Datafu UnitTest failures - linux
BUG-23004	SLIDER-481	Application level exports (exportGroups) should allow multiple exports of the same name on a per component instance basis
BUG-23007	YARN-2557	[YARN-2557]Need to add a parameter "attemptFailuresValidityInterval" in DistributedShell
BUG-23028	HBASE-11989	IntegrationTestLoadAndVerify cannot be configured anymore on distributed mode
BUG-23035	YARN-2559	[YARN-2559] ResourceManager sometime become un-responsive due to NPE in SystemMetricsPublisher
BUG-23092	HIVE-8149	ReduceSinkDeDup optimization needs to be turned off for ACID
BUG-23094	HIVE-8152	BUG-22878 Updates don't allow expressions in set clause

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BUG-23095	HBASE-12052	hbase champlain linux unittest failure
BUG-23104	TEZ-1624	tez champlain linux unittest failure
BUG-23109	AMBARI-7350	Add support for SLIDER to the Champlain stack
BUG-23111	HIVE-8212	alter view query doesn't work from hcatalog anymore
BUG-23130	YARN-2565	[YARN-2565]RM is fails to start when AHS/GHS is enabled in secure mode without doing manual kinit as yarn
BUG-23168	HIVE-8042	Hive queries execute MoveTasks sequentially which slows down performance significantly in large queries.
BUG-23169	HIVE-8167	Champlain compile broken on hive
BUG-23195	HIVE-8170	Hive fails to run on Windows
BUG-23196	HDFS-6584	Umbrella jira for tracking in-progress Archival Storage work
BUG-23215	HIVE-8203	table_insert_auth_role.q, table_insert_auth_user.q and HBase_5 tests are failing because of NPE
BUG-23294	HADOOP-11109	[HADOOP-11109] champlain linux bustage on hadoop-common-project/hadoop-kms/src/site/apt/index.apt.vm
BUG-23340	PIG-4187	Orc_3 fails with FileNotFoundException
BUG-23355	YARN-2594	[YARN-2594] ResourceManager sometimes Hangs blocking tests to run
BUG-23370	HBASE-12072	Integration tests stuck on windows and linux
BUG-23469	YARN-2569	BUG-12006 [YARN-2569]Log Handling for LRS API Changes
BUG-23470	YARN-2581	BUG-12006 [YARN-2581]NMs need to find a way to get LogAggregationContext
BUG-23471	YARN-2583	BUG-12006 [YARN-2583]Modify the LogDeletionService to support Log aggregation for LRS
BUG-23472	YARN-2582	BUG-12006 [YARN-2582]Log related CLI and Web UI changes for LRS
BUG-23480	HDFS-6988	Make RAM Disk eviction thresholds configurable
BUG-23481	HDFS-6932	Block Mover/Balancer from moving file blocks on transient storage
BUG-23512	YARN-2613	[YARN-2613] NMClient doesn't have retries for supporting rolling-upgrades
BUG-23522	HIVE-8203	BUG-22878 ACID operations result in NPE when run through HS2
BUG-23526	HDFS-7172	HDFS test files checked out of git with incorrect line endings.
BUG-23531	HBASE-12072	Hbase tests get stuck when master is not running
BUG-23545	HDFS-7129	Adding metrics to track usage of memory for writes

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BUG-23556	FLUME-2451	Flume HDFS Sink needs to be able to handle namenode restart
BUG-23574	HBASE-12040	Scan with filters has regression in performance
BUG-23591	SLIDER-450	Rename appConfig.json and resources.json files as default inside the app package
BUG-23602	YARN-2598	[YARN-2598] GHS should show N/A instead of null for the inaccessible information
BUG-23610	SLIDER-448	AMFailuresIT test fails in slider
BUG-23622	YARN-2602	[YARN-2602] Generic History Service of TimelineServer sometimes not able to handle NPE
BUG-23668	HIVE-8277	IP address returned by HiveAuthzContext.getIpAddress() has a leading "/"
BUG-23714	MAPREDUCE-5933	BUG-17687 [Review] [MAPREDUCE-5933] Enable MR AM to post history events to the timeline server
BUG-23734	HIVE-8272	Query with particular decimal expression causes NPE during execution initialization
BUG-23741	YARN-2591	[YARN-2591] AHSWebServices should return FORBIDDEN(403) if the request user doesn't have access to the history data
BUG-23750	HADOOP-11177	[HADOOP-11177]MR tar ball for distributed cache should not include version number after unzip.
BUG-23753	HBASE-12123	BucketCache assertion error
BUG-23761	YARN-2615	[YARN-2615] ClientToAMTokenIdentifier and DelegationTokenIdentifier(s)
BUG-23764	HDFS-7167	NPE while moving file between states with Mover
BUG-23805	HIVE-8290	Add 'transactional' property to ACID tables in IUD system tests
BUG-23813	YARN-2627	[YARN-2627]RM log does not have value for "retry-count-window-ms"
BUG-23828	HIVE-8280	CBO : When filter is applied on dimension table PK/FK code path is not in effect.
BUG-23829	HIVE-8263	CBO : TPC-DS Q64 is item is joined last with store_sales while it should be first as it is the most selective
BUG-23832	HIVE-7985	With CBO enabled cross product is generated when a subquery is present
BUG-23833	HIVE-7914	Simplify join predicates for CBO to avoid cross products
BUG-23835	HIVE-8427	test_SinkHive tests failing with java.util.concurrent.TimeoutException
BUG-23855	HIVE-8332	IUD tests are failing because of NPE while running through HS2

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BUG-23857	YARN-2621	[YARN-2621] Simplify the output when the user doesn't have the access for getDomain(s)
BUG-23869	HIVE-8615	additional double quotes in select * complex datatypes output
BUG-23891	HADOOP-11181 YARN-2656	[HADOOP-11181][YARN-2656] YARN REST call fails via proxy user in both secure windows and secure linux env's
BUG-23918	TEZ-1629	[TEZ-1629] ContainerLauncherImpl's event handler thread should check for threadpool's status before submitting a task
BUG-23922	HIVE-8290	Need to add table property to indicate that a table is transactional
BUG-23923	HIVE-8231	Unable to read data when inserted into empty table via HS2
BUG-23924	HIVE-8311	Txn list information being encoded too late
BUG-23956	HBASE-12162	Hbase HA: LoadTestTool fails immediately after hbase master is killed
BUG-23957	HBASE-12367	IntegrationTestTimeBoundedMultiGetRequestsWithRegionRe calls Linux specific commands
BUG-23962	YARN-2629	[YARN-2629] Make distributed shell use the domain-based timeline ACLs
BUG-23969	YARN-2631	BUG-12006 [YARN-2631]DistributedShell lacks support for LRS log collection interval
BUG-23982	HIVE-8318	Queries hit RuntimeException: cannot find field with constant folding always false
BUG-24017	HADOOP-11207 HIVE-8384 YARN-2676	[HADOOP-11207][YARN-2676] Webhcat tests failing with org.apache.hadoop.security.authentication.client.AuthenticationException
BUG-24044	HIVE-8341	valid transaction list causes failure in transform clause (aka streaming aka python udf)
BUG-24065	YARN-2701	[YARN-2701]HA testing: Tasks failing with error "Can't create directory /grid/0/yarn/local/usercache/hrt_qa/appcache/application_1412158618225_0001 - File exists"
BUG-24071	HDFS-7178	Additional unit tests for single replica writes in disk full situation
BUG-24078	HIVE-8704	Hive HBaseStorageHandler tests failed because of "NPE Expected Accumulo table name to be provided in job configuration"
BUG-24132	HIVE-8387	[Rolling upgrades] Validate Zookeeper retries from WebHCat
BUG-24147	HIVE-8557	zk delegation token store - use kerberos auth, setup acl, use curator
BUG-24148	FALCON-777	champlain falcon unit test failures

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BUG-24189	HDFS-7230	HDFS Rolling downgrade - need to figure out how to use HDFS's -downgrade flag
BUG-24210	HIVE-8372	ORC : Insert into ORC hits Null Pointer exception in MergeFileRecordProcessor.init(MergeFileRecordProcessor.jav
BUG-24211	HADOOP-10416	Hadoop authentication should not switch to anonymous user when a clearly defined user has an expired token
BUG-24243	SLIDER-486	slider bin internally uses -classpath and causes issues in some jdk (notably suse11.1 Teradata)
BUG-24252	PIG-4257	Bloom_3, Union_7,8,13, Join_6,7,8 fails with Local Rearrange exception
BUG-24291	HIVE-8688	HS2 concur test intermittently fails with org.apache.hive.com.esotericsoftware.kryo.KryoException: Buffer underflow.
BUG-24303	HIVE-8390	CBO: Failures are wrapped in Runtime exception
BUG-24317	FALCON-800	Falcon lineage is not working
BUG-24319	HIVE-8367	delete produces records in wrong order in some cases
BUG-24321	HIVE-8368	compactor writing deletes into base files
BUG-24367	FLUME-2530	Review Coverity scan for Flume
BUG-24369	HBASE-12189	Review Coverity scan result for HBase
BUG-24375	PIG-4250	Review Coverity scan results for Pig
BUG-24379	ZOOKEEPER-2064	Review Coverity scan results for Zookeeper
BUG-24389	FALCON-819	Problem with invalid Catalog server while submitting a cluster
BUG-24416	HDFS-7237	hadoop namenode -rollingUpgrade should print correct Error message
BUG-24439	HIVE-8392	windows: HiveServer2 Operation.close fails
BUG-24447	TEZ-1643	[TEZ-1643] DAGAppMaster kills DAG & shuts down, when RM is restarted
BUG-24464	HIVE-8408	Hcatalog smoke test is failing with NullPointerException when v2 authorization is enabled in cli
BUG-24470	HIVE-8403	hive build failure on windows due to missing dependency .
BUG-24472	HIVE-8402	ORC pushing SARGs into delta files resulting in ArrayOutOfBoundsException
BUG-24480	HIVE-8427	Hive Streaming client throws NPE
BUG-24508	HBASE-12277	Integration Tests on secure cluster has Error in LoadIncrementalHFiles and Error in running command-line tool
BUG-24515	TEZ-1647	[TEZ-1647] Issue with caching of events in VertexManager::onRootVertexInitialized

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BUG-24551	MAPREDUCE-6126	[MAPREDUCE-6126] Rumen tool returns error "java.lang.IllegalArgumentException: JobBuilder.process(HistoryEvent): unknown event type"
BUG-24553	YARN-2668	hadoop champlain build failure: registry linking to ZK
BUG-24561	AMBARI-7720	Sqoop service check fails on HDP2.2
BUG-24570	YARN-2651	BUG-12006 [YARN-2651]Spin off the LogRollingInterval from LogAggregationContext
BUG-24581	SLIDER-497	Slider funtest are failing on secure slider cluster due to AM failure
BUG-24629	FALCON-789	Retention failed during context serialization
BUG-24642	SLIDER-500	Slider-Accumulo: test_continuous_ingestion fails throwing org.apache.hadoop.registry.client.exceptions.InvalidPathnam `/users/hrt_qa/services/org-apache- slider/test-slider-accumulo-continuous- ingest': Invalid Path element "hrt_qa"
BUG-24651	HBASE-11908 HBASE-12561	IntegrationTestRegionReplicaReplication fails with "Load failed with error code 1"
BUG-24676	HBASE-11569 HBASE-12274	ChaosMonkey IntegrationTestIngest fails with balancer and multithread reader errors
BUG-24692	TEZ-1649	Cross_5 hangs for more than 7 hours
BUG-24719	HIVE-8367	BUG-22878 add system test for BUG-24319
BUG-24721	HIVE-8516	TestIUD_5 fails because of NPE in tez mode when vectorization is on
BUG-24729	HDFS-6934	Disable checksum when writing to Memory
BUG-24760	YARN-2637	Hive queries run into AM resource hangs when running under xasecure
BUG-24869	SLIDER-513	AgentFailures2IT test is failing
BUG-24919	YARN-2689	TestSecureRMRegistryOperations failing on windows
BUG-24920	AMBARI-7842	Ambari to manage tarballs on HDFS
BUG-24922	AMBARI-7844	Ambari needs to fix client configuration files to point to versioned tarballs after BUG-24920
BUG-24931	AMBARI-7898	Missing /usr/hdp/current dir when Knox is installed
BUG-24934	PIG-4227	streamingpythonudfs_12 fails with checksum mismatch
BUG-24936	PIG-4227	streamingpythonudfs_5 fails with "StreamingUDFException: LINE : Error deserializing output."
BUG-24945	KNOX-443	Release Notes for Knox->HS2 with new Connect String and Rolling Upgrades
BUG-24958	SLIDER-516	Make Slider registry call not default to current user.

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BUG-24975	TEZ-1666	UserPayload should be null if the payload is not specified
BUG-24979	TEZ-1667	Add a system test for InitializerEvents
BUG-24980	TEZ-1668	InputInitializers should be able to register for Vertex state updates in the constructor itself
BUG-24981	SLIDER-520	secure slider funtests are failing with exitcode=36
BUG-24991	SLIDER-522	Storm-slider security throws NPE at create.
BUG-24993	TEZ-1083	Enable IFile RLE for DefaultSorter
BUG-25020	HIVE-6715	HiveServer2 user name not being passed in NOSASL authentication setting
BUG-25034	TEZ-1689 TEZ-1703 TEZ-1267	[TEZ-1267, TEZ-1689, TEZ-1703] Exception handling when Routing Events
BUG-25069	HIVE-8474	Vectorization and ACID selects fail if not all columns are selected
BUG-25071	TEZ-1083	[TEZ-1083] Enable IFile RLE for DefaultSorter
BUG-25072	TEZ-1141	[TEZ-1141] DAGStatus.Progress should include number of failed attempts
BUG-25073	TEZ-1424	[TEZ-1424] Fixes to DAG text representation in debug mode
BUG-25074	TEZ-1590	[TEZ-1590] Fetchers should not report failures after the Processor on the task completes
BUG-25075	TEZ-792	[TEZ-792] Default staging path should have user name
BUG-25078	TEZ-1638	[TEZ-1638] Missing type parametrization in UnorderedKVInputConfig?
BUG-25079	TEZ-1596	[TEZ-1596] Secure Shuffle utils is extremely expensive for fast queries
BUG-25081	TEZ-1210	[TEZ-1210] TezClientUtils.localizeDagPlanAsText() needs to be fixed for session mode
BUG-25089	TEZ-1669	yarn-swimlanes.sh throws error
BUG-25093	TEZ-1666	UserPayload should be null if the payload is not specified
BUG-25095	TEZ-1567	Avoid blacklisting nodes when the disable blacklisting threshold is about to be hit
BUG-25099	HIVE-8588	Webhcat sqoop tests fail to find the JDBC classes
BUG-25102	HIVE-8543	Compaction tests failing due to the state getting stuck at ready for cleaning/working
BUG-25103	HIVE-8643	Webhcat tests running as other user failing to execute commands

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BUG-25112	HIVE-8461	[HIVE-8461] Vectorized query has different Decimal result (Vector_Aggregate_9)
BUG-25139	AMBARI-7953	Modify HDP-2.2 stack advisor for the tez config properties
BUG-25141	AMBARI-7921	Ambari should not inherit any tez configs from the 2.1 stack
BUG-25162	HBASE-12485	"Online" Sequence number value of a region at the time of opening is unexpected
BUG-25164	HIVE-8534	update hive configuration whitelist for sql std authorization
BUG-25168	HBASE-12052	BUG-22192 TestLoadIncrementalHFilesUseSecurityEndPoint fails
BUG-25170	HBASE-12278	BUG-22192 TestSecureLoadIncrementalHFilesSplitRecovery fails due to TableNotFoundException
BUG-25180	FALCON-678	Falcon's default port is 15443 if TLS is enabled, 15000 otherwise.
BUG-25181	FALCON-678	Falcon's default port is 15443 if TLS is enabled, 15000 otherwise.
BUG-25196	FLUME-2508	Windows: Hive Streaming table has extra carriage feed (CR) in the last column when using Spooling directory source
BUG-25274	AMBARI-7959	Change Ambari Hive Runtime configs for Champlain
BUG-25283	SLIDER-540	Slider tests do not respect configs from yarn-site.xml
BUG-25313	YARN-2715	[YARN-2715] RM get delegation token is broken for proxy users when using hadoop RPC
BUG-25323	YARN-2720	Windows: Wildcard classpath variables not expanded against resources contained in archives
BUG-25365	SLIDER-543	champlain CI: slider builds are broken
BUG-25386	TEZ-1712	Union_9, Rank_10 fails with Vertex killed as other vertex failed.
BUG-25413	HIVE-8021	ctas/insert into queries + cbo
BUG-25419	HIVE-8637	Insert into nonbucketedtable select * from bucketedtable does not work
BUG-25420	HIVE-8605	Hive metastore backward incompatible, should not require property existing changes to run
BUG-25442	YARN-2703	BUG-12006 [YARN-2703]Add logUploadedTime into LogValue for better display
BUG-25453	HIVE-8629	test_SinkHive tests failing with org.apache.flume.sink.hive.HiveWriter \$ConnectFailure error
BUG-25470	YARN-2717	BUG-12006 [YARN-2717]containerLogNotFound log shows multiple time for the same container

Key	Apache JIRA	Summary
BUG-25516	SLIDER-306	Slider cli list sub-command cannot list stopped applications
BUG-25523	YARN-2743	[YARN-2743] yarn apps failing JA009: Failed to run job : Failed to renew token: Kind: RM_DELEGATION_TOKEN on secure clusters
BUG-25525	YARN-2741	[YARN-2741] HDP 2.1.3 - Customer getting "No Logs available for Container Container_<number>" when output to non-default disk
BUG-25532	ACCUMULO-3249	UnorderedWorkAssignerReplicationIT.dataWasReplicatedTo failed because test timed out
BUG-25546	HIVE-8547	partition_varchar2 fails with CBO after some recent fix
BUG-25560	YARN-2723	[YARN-2723] rmdadmin - replaceLabelsOnNode does not correctly parse port
BUG-25565	HIVE-8597	Hive CustomVertexManager should send the same set of splits for the small table in case of SMB joins
BUG-25576	YARN-2279	[YARN-2279] Add UTs to cover timeline server authentication
BUG-25580	HBASE-12319	Inconsistencies during region recovery due to close/open of a region during recovery
BUG-25581	HIVE-8560	3rd party SerDes do not get table properties during initialize()
BUG-25585	YARN-2726	[YARN-2726] CapacityScheduler should explicitly log when an accessible label has no capacity
BUG-25639	FALCON-831	Operation on non existing entity throws internal server error
BUG-25645	AMBARI-7933	Knox install with Ambari: Configuration Improvements - 1
BUG-25651	SLIDER-557	HBase slider deployment fails on secure cluster
BUG-25704	AMBARI-7976	BUG-25675 Ambari: Add oozie install user as an Oozie admin user
BUG-25722	HDFS-7305	[HDFS-7305] HDFS HA: Seeing NPE when running slive test
BUG-25732	YARN-2734	BUG-12006 [YARN-2734] If a sub-folder is encountered by log aggregator it results in invalid aggregated file
BUG-25744	MAPREDUCE-6018	BUG-17687 [Review] [MAPREDUCE-6018] Create a framework specific config to enable timeline server
BUG-25763	SLIDER-560	Add default secured appConfig.json file to application packages
BUG-25771	AMBARI-7994	Query in Tez throws RuntimeException due to buildSupportsSnappy
BUG-25781	HDFS-7359	When in HA mode, dfs.namenode.secondary.http-address is still being loaded and used

Key	Apache JIRA	Summary
BUG-25838	YARN-2743	[YARN-2743] yarn applications fail with digest mismatch errors on un secure cluster
BUG-25848	HBASE-12356	phoenix champlain Linux unit-test failures
BUG-25867	HBASE-11716	IntegrationTestIngestWithVisibilityLabels failed with verification error
BUG-25870	HBASE-12485	test_ReplicaCopyTable_verifyCopyTable[tableone] fails with org.apache.hadoop.fs.FileAlreadyExistsException in RS log
BUG-25915	SLIDER-602	Tracking ticket to review and commit RM integration changes for Service Registry
BUG-25924	YARN-2770	[YARN-2770] Timeline Service delegation tokens need to be renewed by the RM
BUG-25958	HBASE-11976	ChaosMonkey tests failed to write
BUG-25968	YARN-2747	[YARN-2747]TestAggregatedLogFormat fails in trunk
BUG-26015	HIVE-8562	MySQL compaction failures
BUG-26043	HBASE-12485	test_replicacopytable_verifycopytable test fails with IOException error: 'Failed to create SeqId file' in RS log
BUG-26051	HBASE-12377	hbase:meta not online for IntegrationTestManyRegions
BUG-26052	HIVE-8619	CBO: ".0" saga, part 3
BUG-26054	AMBARI-8092	Create categories of configuration for Hive
BUG-26056	HIVE-8631	ACID / Streaming : When the txn list gets long, the queries on ACID tables are failing
BUG-26060	HIVE-8635	CBO: ambiguous_col negative test no longer fails
BUG-26062	ZOOKEEPER-1897	Zookeeper 3.4.6 does not execute via command line
BUG-26064	FALCON-839	Falcon ACL validation is not working
BUG-26093	SLIDER-613	'AppsThroughAgentIT-testCreateFlex' Failed on cluster with encryption on
BUG-26098	TEZ-1713	Tez complains about path not being fully qualified if the schema is not specified
BUG-26106	FALCON-840	SOURCECLUSTER field in -filterBy parameter doesn't work for /api/instance/list
BUG-26121	HADOOP-11068	oozie webconsole broken in secure clusters
BUG-26156	AMBARI-8109	Fix Tez configuration section on Ambari UI
BUG-26185	MAPREDUCE-6142	BUG-17687 [MAPREDUCE-6142] Test failure in TestJobHistoryEventHandler and TestMRTimelineEventHandling

Key	Apache JIRA	Summary
BUG-26186	TEZ-1698	Use ResourceCalculatorPlugin instead of ResourceCalculatorProcessTree in Tez
BUG-26188	SLIDER-581	Windows: resolvecommandit test failed with wrong error code 0 not 44
BUG-26189	SLIDER-581	Windows: UnknownClusterOperationsIT test exit code - 0 not 69
BUG-26190	SLIDER-581	Windows: AgentClusterLifecycleIT test failed with error code 0, expected 73
BUG-26224	AMBARI-8028	After adding hdp.version in yarn-site.xml Distributed Shell is failing
BUG-26227	OOZIE-2051	Easier use of Oozie + Tez jobs with hdp.version
BUG-26239	YARN-2769	[YARN-2769] Timeline Acls test failing on windows
BUG-26242	HBASE-12398	Race condition in region opening
BUG-26251	YARN-2788	[YARN-2788] YARN champain JobHistoryServer cannot read logs written by 2.4.0 builds
BUG-26264	CALCITE-448 HIVE-8656	[HIVE-8656] CBO: auto_join_filters fails
BUG-26280	HIVE-8660	hive.exec.dynamic.partition.mode property should be included in the default list for hive.security.authorization.sqlstd.confwhitelist
BUG-26301	SLIDER-534	Slider-HA: CommandEnvironmentIT gets Error
BUG-26331	HIVE-8646	Oozie Hive action fails with NoClassDefFound for FieldSchema class
BUG-26365	SLIDER-588	AppsThroughAgentIT test failed with 'Application registry is not accessible'
BUG-26367	FALCON-862	/list/entities with tag also return entities without tags
BUG-26386	YARN-2779	[YARN-2779] SystemMetricsPublisher can use Kerberos directly instead of timeline DT
BUG-26394	FALCON-880	hive job via oozie failed read timeouts to the metastore
BUG-26402	AMBARI-8119	Knox Ambari Integration : Knox user/group not listed in Service accounts page
BUG-26423	YARN-1964	[Docker] Review and commit docker patch from YARN-1964
BUG-26432	HBASE-12402	test_hbaseLoadTestTool gets stuck complaining about AccessDeniedException
BUG-26435	AMBARI-8070	Ambari is exporting values in hbase-env.sh twice
BUG-26443	HIVE-8685	WebHCat DDL commands in non-secure mode failing
BUG-26469	SLIDER-598	Slider-Hbase creation on Windows fails due to JsonParse Exception

Key	Apache JIRA	Summary
BUG-26507	SLIDER-596	Slider should automatically replace \${USER_NAME} token from config
BUG-26526	YARN-2795	[YARN-2795] Resource Manager fails startup with HDFS label storage and secure cluster
BUG-26552	YARN-1922	Child processes aren't killed when container process is killed
BUG-26573	TEZ-1731	Checksum Errors when running queries in Tez
BUG-26578	FALCON-858	In falcon listing processes with custom filter fails
BUG-26590	FALCON-859	falcon entities/summary/feed/ endpoint gives internal server error
BUG-26592	HBASE-12449	Multiple tests are failing because of System time goes back frequently on SLES
BUG-26594	FALCON-857	In falcon fetching status of deleted feed throws internal server error
BUG-26595	FALCON-851	In falcon - process with bad acl can be submitted
BUG-26604	YARN-2786	System tests are disabled for Node Labels
BUG-26608	SLIDER-593	[SLIDER-593] Slider registry client returns IOException returned a response status of 302 Found.
BUG-26646	SLIDER-603	AppsThroughAgentIT fails with NPE
BUG-26658	YARN-2798	[YARN-2798] Oozie jobs failing on secure cluster with timeline server DT issues
BUG-26662	PIG-4257	Rank_*, Union_4,5, Order_18, 20 fails with Can't get Master Kerberos principal for use as renewer
BUG-26666	YARN-2804	[YARN-2804] Timeline server out log explodes with tons of repeated exceptions
BUG-26688	SLIDER-605	slider list command does not return application in the order of most recent first
BUG-26707	SLIDER-606	[SLIDER-606] quicklinks dont return any data for slider apps
BUG-26747	HIVE-8711	TxnHandler not catch deadlocks on Postgres, Oracle, and SQLServer
BUG-26792	HIVE-8740	update query failed due to IndexOutOfBoundsException with hive.optimize.sort.dynamic.partition on
BUG-26795	MAPREDUCE-6149	[MAPREDUCE-6149] Documentation our new configuration to log4j.property in mapred-site.xml
BUG-26796	HDFS-7340	[HDFS-7340] rollingUpgrade prepare command does not have retry cache support
BUG-26803	HIVE-8719	CLONE - load data or insert into partition changes partition location previously defined.

Key	Apache JIRA	Summary
BUG-26809	HDFS-7359	In HA mode, if dfs.namenode.secondary.http-address has value "null" it prevents namenode to start properly and generates mixmatch txid
BUG-26831	YARN-2805	[YARN-2805] RM failed to startup because of 'Failed to login' exception
BUG-26869	KNOX-468	Knox config for Group Look up to be optimized
BUG-26885	HIVE-8772	zookeeper info logs are always printed from beeline
BUG-26892	YARN-2812	BUG-22334 [YARN-2812] Unit test failures in TestApplicationHistoryServer in Champlain builds
BUG-26910	HIVE-8754	Test_Sqoop failing in secure cluster
BUG-26912	YARN-2632	[YARN-2632] Document NodeManager Restart Feature
BUG-26926	HIVE-8732	ORC string statistics are not merged correctly
BUG-26963	HDFS-7364	HDFS Rebalance Always Shows 0 Bytes Moved
BUG-26992	HIVE-8745	Joins on decimal keys return different results whether they are run as reduce join or map join
BUG-27014	YARN-2813	[YARN-2813] NPE from MemoryTimelineStore.getDomains
BUG-27030	AMBARI-8195	Slider App View is not replacing JAVA_HOME
BUG-27084	YARN-2818	[YARN-2818] Remove the logic to inject entity owner as the primary filter
BUG-27095	SLIDER-621	slider AgentClusterLifecycleIT test case timing out after 10 minutes
BUG-27128	SLIDER-624	Couple of slider-hbase tests failed due to delayed application launch
BUG-27130	HIVE-8785	HiveServer2 LogDivertAppender should be more selective for beeline getLogs
BUG-27141	HIVE-8875	concurrent_delete_dynamic acid concurrency test failed on a cluster with postgres metastore
BUG-27182	YARN-2846	[YARN-2846] Work Preserving NM Restart - Restarting NMs causes app attempt failure
BUG-27233	TEZ-1750	Possible Out of Order scheduling can end up slowing down queries
BUG-27254	FALCON-875	Unexpected behaviour with entity summary endpoint
BUG-27261	FALCON-874	In falcon instance/list endpoint orderBy=STATUS is case-sensitive
BUG-27281	HDFS-7387	NFS: File gets downloaded partially
BUG-27287	PIG-4314	Ambari Pig test hangs and make no progress
BUG-27312	HIVE-8797	MoveTaskError while running concurrent_insert_values_dynamic_partitioned.q

Key	Apache JIRA	Summary
		test on a cluster with postgres as metastore
BUG-27315	HIVE-8798	ORACLE: acid_concurrency test failure due to "ORA-08177: can't serialize access for this transaction" error
BUG-27321	SLIDER-630	Linux UT failures on CentOS5, Debian, and Suse11
BUG-27326	HDFS-7383	NullPointerException in DataNode.requestShortCircuitFdsForRead
BUG-27327	HDFS-7382	NullPointerException in SaslDataTransferServer.receive
BUG-27356	HIVE-8880	TestIUD_3 failed because it didn't insert one record
BUG-27359	YARN-2834	[YARN-2834] RM crashed with NPE
BUG-27363	HADOOP-11286	Pull HADOOP-11286 into Champlain
BUG-27368	AMBARI-8240	Quicklinks from Ambari slider app dont return data
BUG-27396	YARN-2830	Cherry-pick YARN-2830 in Champlain
BUG-27427	HIVE-7943	hive.security.authorization.createtable.owner.grants is ineffective with Default Authorization
BUG-27433	HIVE-8830	HCatalog E2E testruns get stuck
BUG-27442	YARN-2841	[YARN-2841]RMProxy should retry EOFException
BUG-27476	HIVE-8797	concurrent_insert_values_dynamic_partitioned and concurrent_insert_values_partitioned failed due to movetask error on windows
BUG-27494	YARN-2843	[YARN-2843] NodeLabels manager should trim all inputs for hosts and labels
BUG-27495	FALCON-889	Windows azure replication fails with we can't create it using anonymous credentials
BUG-27526	YARN-2853	[YARN-2853] One of our system test running Tez are hung, looks like RM is hung
BUG-27546	HIVE-8812	Fix TestMinimrCliDriver.testCliDriver_auto_sortmerge_join_16 on Windows
BUG-27591	MAPREDUCE-6156	[MAPREDUCE-6156] Fetcher - connect() doesn't handle connection refused correctly
BUG-27626	SLIDER-646	AgentLaunchFailureIT test failed with error code 68
BUG-27680	HADOOP-11217 HDFS-7391	[HADOOP-11217] [HDFS-7391] Pull in SSLv2Hello fixes into Champlain
BUG-27686	ARGUS-182	Date format in Audit log is incorrect
BUG-27740	SLIDER-647	allocation requests not being satisfied when a cluster goes to labels
BUG-27784	YARN-2879	[YARN-2879] Verify downlevel client compatibility behavior

Key	Apache JIRA	Summary
BUG-27844	HBASE-12478	HBASE-12478 HBASE-10141 and MIN_VERSIONS are not compatible
BUG-27911	HIVE-8901	Hive queries failing withavax.jdo.JDODataStoreException: Could not retrieve transaction read-only status server
BUG-28027	FALCON-902	Documentation of falcon parameters
BUG-7101	HDFS-172 HDFS-4793	HDFS-172: uploading file larger than the spaceQuota limit results in a partial file.
BUG-8486	HDFS-5147 HDFS-6507	dfsadmin commands should interact with the active namenode in ha setup
BUG-9137	YARN-796	Make nodes in a Yarn cluster be identifiable by its label
RMP-1250	KNOX-88	Knox to provide full support for HDFS HA
RMP-1370	HIVE-538	Produce a single JDBC connector JAR to HiveServer2
RMP-1473	AMBARI-6857	Storm kerberos security support
RMP-1480	HADOOP-9640	RPC Congestion Control with FairCallQueue
RMP-1498	HADOOP-10345	Sanitize the the inputs (groups and hosts) for the proxyuser configuration
RMP-1570	FLUME-2442	RMP-1511 encrypt ssl truststore / keystore passwords within flume config file
RMP-1577	HBASE-11344	RMP-1507 HBase to adhere to security checklist
RMP-1627	HBASE-11580	RMP-1507 HBase HA: Proper recovery from failed secondary
RMP-1628	HBASE-11367 HBASE-11511 HBASE-11512 HBASE-11567 HBASE-11568 HBASE-11569 HBASE-11571 HBASE-11842	RMP-1507 HBase HA: Support < 5s staleness reading from secondaries
RMP-1631	HBASE-11331	RMP-1507 Block cache compression
RMP-1632	HBASE-10641	RMP-1507 Bucket cache improvements
RMP-1699	FALCON-470 FALCON-613	Enhancements to tagging capabilities
RMP-1796	HADOOP-8943	Hadoop should support groups in a composite from both Linux and LDAP
RMP-1828	SQOOP-1322	RMP-1509 Support multiple partition keys in Sqoop HCat integration
RMP-1876	SQOOP-1322	RMP-1509 Support all Hive types when importing via HCatalog

Key	Apache JIRA	Summary
RMP-1881	OOZIE-1769	RMP-1510 Allow updating job properties on existing workflow and coordinator jobs.
RMP-1882	OOZIE-1492	RMP-1510 Oozie HA needs to work with HCatalog and SLA notifications
RMP-1885	DATAFU-58 DATAFU-59	RMP-1508 Package and certify Apache DataFu Pig
RMP-1886	HIVE-7068	RMP-1512 Hive / Accumulo Connector
RMP-1894	PHOENIX-1069	RMP-1507 Build secondary indexes during Phoenix bulk import
RMP-1895	HBASE-11137 HIVE-6584	RMP-1507 Allow Hive queries over snapshotted HBase tables
RMP-1930	OOZIE-1532	RMP-1510 Purging should remove completed children job for long running jobs
RMP-1965	HIVE-7158	More intelligent reducer allocation
RMP-1966	HIVE-7159	Filter nulls early in equi-joins
RMP-1979	HIVE-7361 HIVE-7416 HIVE-7451 HIVE-7488	Changes in Hive needed to support XA Secure integration
RMP-1981	PIG-4102	RMP-1508 Pig should support ORC predicate pushdown
RMP-1998	TEZ-15	RMP-1988 AM Recovery Umbrella
RMP-2038	OOZIE-1865	RMP-1510 Oozie HA support in Secure Clusters
RMP-2066	SLIDER-86	Slider on all Windows platforms supported by HDP
RMP-2068	SLIDER-89	Slider on Kerberos-enabled Cluster
RMP-2085	SLIDER-214	Usability improvements to Slider
RMP-2113	SLIDER-181	Requirements to run "Storm on YARN" via Slider
RMP-2114	SLIDER-182	Requirements to run "Accumulo on YARN" via Slider
RMP-2115	SLIDER-180	Requirements to run "HBase on YARN" via Slider
RMP-2116	YARN-913	Add a registry for services in a YARN cluster
RMP-2117	SLIDER-183	Long lived service support in Slider
RMP-2118	SLIDER-69	Failure resiliency
RMP-2260	YARN-2257	(2.1) - [YARN-2411] Support Capacity Scheduler server side mapping of user to a default queue

1.7. Apache Patch Information

The following sections list patches in each HDP 2.2.0 component beyond what was fixed in the base version of the Apache component.

1.7.1. Accumulo 1.6.1

- [ACCUMULO-2386](#) Update release guide to include specific CHANGES generation
- [ACCUMULO-2571](#) Define replication state machines for data
- [ACCUMULO-2572](#) Define ReplicaSystem interface
- [ACCUMULO-2573](#) Define Thrift IDL for data transfer
- [ACCUMULO-2574](#) Define storage data structure for data that needs replication
- [ACCUMULO-2575](#) Update GC to not remove files before replication has happened
- [ACCUMULO-2579](#) Modify "live ingest" code path to create replication entries
- [ACCUMULO-2581](#) Create service in Master to assign replication work
- [ACCUMULO-2582](#) Create insight to replication in the Monitor
- [ACCUMULO-2583](#) Create services that handles replication "receives"
- [ACCUMULO-2587](#) Provide authentication criteria between a master and slave
- [ACCUMULO-2650](#) Property additions for configuration of replication
- [ACCUMULO-2684](#) Cannot easily print long Key
- [ACCUMULO-2705](#) Don't try to assign permissions to !SYSTEM user when creating a table
- [ACCUMULO-2709](#) Create service in Master to manage replication records
- [ACCUMULO-2799](#) Create ReplicationOperations
- [ACCUMULO-2808](#) Update to Jetty 9
- [ACCUMULO-2819](#) Provide WorkAssigner which is order-aware
- [ACCUMULO-2829](#) tool.sh doesn't include new mapreduce jar in libjars
- [ACCUMULO-2830](#) Example configurations/templates reference incorrect class name for Shell audit log
- [ACCUMULO-2833](#) Create and configure a shell formatter for Status messages
- [ACCUMULO-2834](#) Immediately re-queue files which have more data to replicate
- [ACCUMULO-2835](#) Track explicit lengths of WALs for more accurate reporting
- [ACCUMULO-2846](#) Need to re-use DataInputStream for reading files that need replication
- [ACCUMULO-2847](#) Update user documentation
- [ACCUMULO-2858](#) Inadvertently always falling back on sync
- [ACCUMULO-2858](#) Inadvertently always falling back on sync

- [ACCUMULO-2901](#) Document practical use-cases for replication
- [ACCUMULO-2910](#) Ineffective null check for replicationSources in Mutation#write()
- [ACCUMULO-2912](#) java.lang.NoClassDefFoundError: com/google/protobuf/GeneratedMessage
- [ACCUMULO-2913](#) Continue stabilization of replication UTs/ITs
- [ACCUMULO-2914](#) Move ReplicationTest into an IT
- [ACCUMULO-2918](#) TServers expect zookeeper to have parent nodes created
- [ACCUMULO-2923](#) Replication configuration expected numeric only table IDs
- [ACCUMULO-2925](#) Timestamp is not propagated to peer
- [ACCUMULO-2939](#) Missing protobuf dependency in tarball
- [ACCUMULO-2963](#) ReplicationDriver daemon dies from RTE thrown out of BatchScanner
- [ACCUMULO-2964](#) Unexpected ThriftSecurityException from BatchScanner
- [ACCUMULO-2973](#) ShellServerIT\#namespaces is timing out
- [ACCUMULO-2997](#) Race condition in resizing of TServer client pool
- [ACCUMULO-3028](#) Extraneous trace logging
- [ACCUMULO-3040](#) Create JMX endpoint for replication status
- [ACCUMULO-3071](#) Add replication service ports to user manual
- [ACCUMULO-3077](#) File never picked up for replication
- [ACCUMULO-3111](#) Race condition in MetaSplitIT
- [ACCUMULO-3130](#) Some replication ITs fail with SSL enabled
- [ACCUMULO-3131](#) CyclicReplicationIT doesn't adhere to useSslForIT option <
- [ACCUMULO-3132](#) Fate uses java serialization which is error-prone between upgrades
- [ACCUMULO-3160](#) ExamplesIT usage of MAC is sub-par
- [ACCUMULO-3175](#) More IT stabilizations
- [ACCUMULO-3194](#) BulkSplitOptimizationIT failed with 5 files associated with tablet instead of 1-4 files
- [ACCUMULO-3212](#) Configuration objects created with CredentialProvider load defaults unnecessarily
- [ACCUMULO-3213](#) EOFException on metadata tablet during DeleteTableDuringSplitIT
- [ACCUMULO-3214](#) NPE checking if replication is enabled during tablet assignment

- [ACCUMULO-3215](#) Import tries to use default DFS directory instead of configured
- [ACCUMULO-3217](#) KeyValue doesn't implement equals or hashCode
- [ACCUMULO-3218](#) ZooKeeperInstance only uses first ZooKeeper in list of quorum
- [ACCUMULO-3220](#) Division by zero if encryption cipher isn't a block cipher
- [ACCUMULO-3221](#) Unintentional integer overflow in Shell authorization timeout
- [ACCUMULO-3223](#) DefaultLoadBalancer allows a NPE just to catch it
- [ACCUMULO-3225](#) Dead code in ConfigCommand
- [ACCUMULO-3226](#) Unnecessary null check in Authorizations constructor
- [ACCUMULO-3228](#) fix potential resource leaks
- [ACCUMULO-3233](#) Random port for ZK in MiniAccumulo might not be unique
- [ACCUMULO-3242](#) Consolidate ZK code WRT retries
- [ACCUMULO-3243](#) Ensure all ITs have some timeout
- [ACCUMULO-3247](#) ZooKeeperInstance could use a toString
- [ACCUMULO-3249](#) New replication status message created for file that was already replicated
- [ACCUMULO-3257](#) Make Randomwalk respect timeout (maxSec) more reliably
- [ACCUMULO-3258](#) Warning about synconclose is way too spammy
- [ACCUMULO-3259](#) Randomwalk Bulk.xml create queued threads without bound.
- [ACCUMULO-3261](#) Image Randomwalk fails if no rows are found
- [ACCUMULO-3264](#) AuditMessageIT broken
- [ACCUMULO-3271](#) Add splits to tables in MultiTable randomwalk module
- [ACCUMULO-3275](#) "not balancing because of unhosted tablets" message should include number of unhosted tablets
- [ACCUMULO-3276](#) Shard.xml hung with no client output
- [ACCUMULO-3279](#) BackupMasterIT failed with BadVersion ZK Exception
- [ACCUMULO-3286](#) ConditionalWriterIT.testTrace failed
- [ACCUMULO-3287](#) CyclicReplicationIT failed because it couldn't start ZK
- [ACCUMULO-3290](#) ShellServerIT#listscans fails if scan shows up a QUEUED
- [ACCUMULO-3292](#) ConditionalWriterIT#testOffline failed

- [ACCUMULO-3296](#) ZooUtil.recursiveDelete looping indefinitely
- [ACCUMULO-3301](#) TableOperationsImpl.waitForTableStateTransition(String,TableState) never fetches `future` column
- [ACCUMULO-3305](#) MiniAccumuloClusterImpl#killProcess should use the stopWithTimeout method
- [ACCUMULO-3316](#) Update TLS usage to mitigate POODLE
- [ACCUMULO-3317](#) Change Jetty configuration to disallow SSLv3
- [ACCUMULO-3318](#) Alter Thrift RPC components to disallow SSLv3
- [ACCUMULO-3320](#) Replication reference prematurely closed and removed.
- [ACCUMULO-3338](#) Update example classpath configuration
- [ACCUMULO-378](#) Multi data center replication

1.7.2. DataFu 1.2.0

- [DATAFU-58](#) Unit tests against Hadoop 2
- [DATAFU-59](#) Fix unit tests under Window

1.7.3. Falcon 0.6.0

- [FALCON-403](#) Add support for Falcon to run on Windows
- [FALCON-434](#) Migrate HCatalog APIs to new namespace
- [FALCON-417](#) Upgrade Hive and HCatalog to latest stable version
- [FALCON-896](#) Upgrade Oozie to 4.1.0 and make it the default for Falcon

1.7.4. Flume 1.5.2

- [FLUME-1734](#) Create a Hive Sink based on the new Hive Streaming support
- [FLUME-1334](#) Flume startup script for Windows
- [FLUME-2442](#) Need an alternative to providing clear text passwords in flume config
- [FLUME-2224](#) Disable File channel dual checkpointing on Windows
- [FLUME-2467](#) Disable Morphline Sink and Kite Dataset sinks on Windows Builds
- [FLUME-2226](#) Refactor BlobHandler out of morphline sink and into HTTP source
- [FLUME-2227](#) Move BlobDeserializer from Morphline Sink to flume-ng-core
- [FLUME-2337](#) Export JAVA_HOME in flume-env.sh.template and increase heap size

- [FLUME-2511](#) Allow configuration of enabled protocols in Avro source and Rpc client
- [FLUME-2451](#) HDFS Sink Cannot Reconnect After NameNode Restart
- [FLUME-2068](#) File Channel issue - recovering from BadCheckpoint exception on Windows
- [FLUME-2224](#) Disable File channel dual checkpointing on Windows
- [FLUME-2407](#) Spillable Channel sometimes fails on reconfigure
- [FLUME-2145](#) TestCheckpointRebuilder.testFastReplay fails on Windows
- [FLUME-2218](#) TestFileChannelIntegrityTool tests failing on Windows
- [FLUME-2219](#) Windows: Flume tests need to know location of Hadoop native libraries (hadoop.dll)
- [FLUME-2137](#) Fix StagedInstall.java to invoke the correct startup script on Windows
- [FLUME-2058](#) TestFlumeEventQueue in FileChannel fails on Windows
- [FLUME-2136](#) Fix intermittent test failure in TestMonitoredCounterGroup on Windows
- [FLUME-2150](#) Fix TestFileChannelEncryption failure on Windows
- [FLUME-2358](#) File Channel needs to close BackingStore & EventQueue before deleting files in checkpoint directory
- [FLUME-2359](#) TestFileChannelIntegrityTool throws exception on class teardown on Windows
- [FLUME-2402](#) Warning seen when overflow is disabled for Spillable Channel
- [FLUME-2412](#) Improve Logging in Spillable Channel
- [FLUME-2122](#) Minor cleanups of User guide
- [FLUME-2175](#) Update Developer Guide with notes on how to upgrade Protocol Buffer version
- [FLUME-2123](#) Morphline Solr sink missing short type name
- [FLUME-2162](#) TestHDFSEventSinkOnMiniCluster.maxUnderReplicationTest fails on hadoop2
- [FLUME-2146](#) Windows: Tmp file creation in TestBodyTextEventSerializer.java needs fixing
- [FLUME-2151](#) Windows: Update TestExecSource to use native commands on Windows
- [FLUME-2501](#) Updating HttpClient lib version to ensure compat with Solr
- [FLUME-2508](#) LineDeserializer causes incorrect behavior in SpoolDir Source on Windows
- [FLUME-2530](#) Resource leaks found by Coverity tool
- [FLUME-2532](#) Windows : TestReliableSpoolingFileEventReader - need to close filereader

- [FLUME-2534](#) Windows : Windows : TestFlumeEventQueue has many failures
- [FLUME-2541](#) Bug in TestBucketWriter.testSequenceFileCloseRetries
- [FLUME-2441](#) Unit test TestHTTPSource.java failed with IBM JDK 1.7
- [FLUME-2520](#) HTTP Source should be able to block a prefixed set of protocols.
- [FLUME-2533](#) HTTPS tests fail on Java 6
- [FLUME-2544](#) Windows: Incorrect Path Separator used in HDFS path (HDFS Sink)

1.7.5. Hadoop Common/HDFS 2.6.0

- [HADOOP-10840](#) Fix OutOfMemoryError caused by metrics system in Azure File
- [HADOOP-10839](#) Add unregisterSource() to MetricsSystem API.
- [HDFS-7153](#) Add storagePolicy to NN edit log during file creation.
- [HDFS-7093](#) Add config key to restrict setStoragePolicy.
- [HDFS-6581](#) Support for writing to single replica in RAM. Applied HDFS-6581.merge.15.patch to C4hamplain. This is a consolidated patch containing all feature changes and was applied to trunk
- [YARN-2254](#) TestRMWebServicesAppsModification should run against both
- [YARN-1979](#) TestDirectoryCollection fails when the umask is unusual.

1.7.6. HBase 0.98.4

- [HBASE-12478](#) [HBASE-10141](#) and MIN_VERSIONS are not compatible
- [HBASE-12445](#) hbase is removing all remaining cells immediately after the cell marked with marker = KeyValue.Type.DeleteColumn via PUT
- [HBASE-12432](#) RpcRetryingCaller should log after fixed number of retries like AsyncProcess
- [HBASE-12449](#) Use the max timestamp of current or old cell's timestamp in HRegion.append()
- [HBASE-12416](#) RegionServerCallable should report what host it was communicating with
- [HBASE-10844](#) Coprocessor failure during batchmutation leaves the memstore datastructs in an inconsistent state
- [HBASE-12548](#) Improve debuggability of IntegrationTestTimeBoundedRequestsWithRegionReplicas
- [HBASE-12407](#) HConnectionKey doesn't contain CUSTOM_CONTROLLER_CONF_KEY in CONNECTION_PROPERTIES

- [HBASE-12402](#) ZKPermissionWatcher race condition in refreshing the cache leaving stale ACLs and causing AccessDenied
- [HBASE-11972](#) The "doAs user" used in the update to hbase:acl table RPC is incorrect
- [HBASE-12549](#) Fix TestAssignmentManagerOnCluster#testAssignRacingWithSSH() flaky test
- [HBASE-12403](#) IntegrationTestMTTR flaky due to aggressive RS restart timeout
- [HBASE-12401](#) Add some timestamp signposts in IntegrationTestMTTR
- [HBASE-12562](#) Handling memory pressure for secondary region replicas
- [HBASE-12398](#) Region isn't assigned in an extreme race condition
- [HBASE-12377](#) HBaseAdmin#deleteTable fails when META region is moved around the same timeframe
- [HBASE-12372](#) [WINDOWS] Enable log4j configuration in hbase.cmd
- [HBASE-12560](#) [WINDOWS] Append the classpath from Hadoop to HBase classpath in bin/hbase.cmd
- [HBASE-11716](#) LoadTestDataGeneratorWithVisibilityLabels should handle Delete mutations
- [HBASE-11976](#) Server startcode is not checked for bulk region assignment
- [HBASE-12367](#) Integration tests should not restore the cluster if the CM is not destructive
- [HBASE-12485](#) Maintain SeqId monotonically increasing when Region Replica is on
- [HBASE-12356](#) Rpc with region replica does not propagate tracing spans
- [HBASE-12335](#) IntegrationTestRegionReplicaPerf is flaky
- [HBASE-12317](#) Run IntegrationTestRegionReplicaPerf w.o mapred
- [HBASE-10955](#) HBACK leaves the region in masters in-memory RegionStates if region hdfs dir is lost
- [HBASE-12319](#) Inconsistencies during region recovery due to close/open of a region during recovery
- [HBASE-12301](#) user_permission command does not show global permissions
- [HBASE-12189](#) Fix new issues found by coverity static analysis
- [HBASE-12277](#) Refactor bulkLoad methods in AccessController to its own interface
- [HBASE-12278](#) Race condition in TestSecureLoadIncrementalHFilesSplitRecovery
- [HBASE-11788](#) hbase is not deleting the cell when a Put with a KeyValue, KeyValue.Type.Delete is submitted

- [HBASE-11609](#) LoadIncrementalHFiles fails if the namespace is specified
- [HBASE-12274](#) Race between RegionScannerImpl#nextInternal() and RegionScannerImpl#close() may produce null pointer exception
- [HBASE-12098](#) User granted namespace table create permissions can't create a table
- [HBASE-11794](#) StripeStoreFlusher causes NullPointerException
- [HBASE-12078](#) Missing Data when scanning using PREFIX_TREE DATA-BLOCK-ENCODING
- [HBASE-11728](#) Data loss while scanning using PREFIX_TREE DATA-BLOCK-ENCODING
- [HBASE-12156](#) TableName cache isn't used for one of valueOf methods
- [HBASE-12164](#) Check for presence of user Id in SecureBulkLoadEndpoint#secureBulkLoadHFiles() is inaccurate
- [HBASE-12162](#) HBaseAdmin#getTableDescriptor() may fail in case master fails over
- [HBASE-12095](#) SecureWALCellCodec should handle the case where encryption is disabled
- [HBASE-12123](#) Failed assertion in BucketCache after 11331
- [HBASE-11982](#) Bootstrapping hbase:meta table creates a WAL file in region dir
- [HBASE-10141](#) instead of putting expired store files thru compaction, just archive them
- [HBASE-12099](#) TestScannerModel fails if using jackson 1.9.13
- [HBASE-12072](#) We are doing 35 x 35 retries for master operations (Not full patch. Instead master operations use a 10min timeout)
- [HBASE-12056](#) RPC logging too much in DEBUG mode
- [HBASE-11988](#) AC/VC system table create on postStartMaster fails too often in test
- [HBASE-12055](#) TestBucketWriterThread hangs flakily based on timing
- [HBASE-11798](#) TestBucketWriterThread may hang due to WriterThread stopping prematurely
- [HBASE-11974](#) When a disabled table is scanned, NotServingRegionException is thrown instead of TableNotEnabledException
- [HBASE-12012](#) Improve cancellation for the scan RPCs
- [HBASE-12008](#) Remove IntegrationTestImportTsv#testRunFromOutputCommitter
- [HBASE-11868](#) Data loss in hlog when the hdfs is unavailable
- [HBASE-11989](#) IntegrationTestLoadAndVerify cannot be configured anymore on distributed mode
- [HBASE-11963](#) Synchronize peer cluster replication connection attempts

- [HBASE-11887](#) Memory retention in branch-1; millions of instances of LiteralByteString for column qualifier and value
- [HBASE-11705](#) callQueueSize should be decremented in a fail-fast scenario
- [HBASE-11898](#) CoprocessorHost.Environment should cache class loader instance.
- [HBASE-11876](#) RegionScanner.nextRaw should not update metrics
- [HBASE-11865](#) Result implements CellScannable; rather it should BE a CellScanner
- [HBASE-7910](#) Dont use reflection for security HBASE-12052 BulkLoad Failed due to no write permission on input files
- [HBASE-11973](#) The url of the token file location set by IntegrationTestImportTsv should point to the localfs
- [HBASE-11940](#) Add utility scripts for snapshotting / restoring all tables in cluster
- [HBASE-11847](#) HFile tool should be able to print block headers
- [HBASE-11845](#) HFile tool should implement Tool, disable blockcache by default
- [HBASE-11942](#) Fix TestHRegionBusyWait
- [HBASE-11331](#) [blockcache] lazy block decompression
- [HBASE-11678](#) BucketCache ramCache fills heap after running a few hours
- [HBASE-11810](#) Access SSL Passwords through Credential Provider API (Larry McCay)
- [HBASE-11908](#) Region replicas should be added to the meta table at the time of table creation
- [HBASE-12561](#) Replicas of regions can be cached from different instances of the table in MetaCache
- [HBASE-11863](#) WAL files are not archived and stays in the WAL directory after splitting
- [HBASE-11813](#) CellScanner#advance may overflow stack (Stack)
- [HBASE-11903](#) Directly invoking split & merge of replica regions should be disallowed
- [HBASE-11886](#) The creator of the table should have all permissions on the table
- [HBASE-11857](#) Restore ReaderBase.initAfterCompression() and WALCellCodec.create(Configuration, CompressionContext)
- [HBASE-11762](#) Record the class name of Codec in WAL header
- [HBASE-11580](#) Failover handling for secondary region replicas
- [HBASE-11842](#) Integration test for async wal replication to secondary regions
- [HBASE-11564](#) Improve cancellation management in the rpc layer

- [HBASE-11297](#) Remove some synchronos in the rpcServer responder
- [HBASE-11719](#) Remove some unused paths in AsyncClient
- [HBASE-11718](#) Remove some logs in RpcClient.java
- [HBASE-10814](#) RpcClient: some calls can get stuck when connection is closing
- [HBASE-10942](#) support parallel request cancellation for multi-get
- [HBASE-11851](#) RpcClient can try to close a connection not ready to close
- [HBASE-11835](#) Wrong management of non expected calls in the client
- [HBASE-11836](#) IntegrationTestTimeBoundedMultiGetRequestsWithRegionReplicas tests simple get by default
- [HBASE-11654](#) WAL Splitting dirs are not deleted after replay
- [HBASE-11837](#) Scanner from RegionCoprocesorEnvironment.getTable(TableName) returns no local data
- [HBASE-11766](#) Backdoor CoprocessorHConnection is no longer being used for local writes
- [HBASE-11574](#) hbase:meta's regions can be replicated
- [HBASE-11571](#) Bulk load handling from secondary region replicas
- [HBASE-11569](#) Flush / Compaction handling from secondary region replicas
- [HBASE-11572](#) Add support for doing get/scans against a particular replica_id
- [HBASE-11567](#) Write bulk load COMMIT events to WAL
- [HBASE-11568](#) Async WAL replication for region replicas
- [HBASE-11820](#) ReplicationSource : Set replication codec class as RPC codec class on a cloned Configuration
- [HBASE-11367](#) Pluggable replication endpoint
- [HBASE-11512](#) Write region open/close events to WAL
- [HBASE-11511](#) Write flush events to WAL
- [HBASE-11594](#) Unhandled NoNodeException in distributed log replay mode
- [HBASE-11550](#) Custom value for BUCKET_CACHE_BUCKETS_KEY should be sorted
- [HBASE-11551](#) BucketCache.run() doesn't handle exceptions correctly
- [HBASE-11620](#) Record the class name of Writer in WAL header so that only proper Reader can open the WAL file
- [HBASE-11557](#) Counter.class should always be added as dependencyJar

- [HBASE-10674](#) HCK should be updated to do replica related checks
- [HBASE-11261](#) Handle splitting/merging of regions that have region_replication greater than one
- [HBASE-10818](#) Add integration test for bulkload with replicas
- [HBASE-11214](#) Fixes for scans on a replicated table
- [HBASE-10357](#) Failover RPC's for scans
- [HBASE-11344](#) Hide row keys and such from the web UIs
- [HBASE-11293](#) Master and Region servers fail to start when hbase.master.ipc.address=0.0.0.0, hbase.regionserver.ipc.address=0.0.0.0 and Kerberos is enabled
- [HBASE-10957](#) [HBASE-10070](#): HMaster can abort with NPE in #rebuildUserRegions
- [HBASE-10859](#) HStore.openStoreFiles() should pass the StoreFileInfo object to createStoreFileAndReader().
- [HBASE-10858](#) TestRegionRebalancing is failing
- [HBASE-10785](#) Metas own location should be cached
- [HBASE-10814](#) RpcClient: some calls can get stuck when connection is closing
- [HBASE-10791](#) Add integration test to demonstrate performance improvement
- [HBASE-10810](#) LoadTestTool should share the connection and connection pool
- [HBASE-10794](#) multi-get should handle replica location missing from cache
- [HBASE-10634](#) Multiget doesn't fully work.
- [HBASE-10701](#) Cache invalidation improvements from client side
- [HBASE-10778](#) Unique keys accounting in MultiThreadedReader is incorrect
- [HBASE-10743](#) Replica map update is problematic in RegionStates
- [HBASE-10616](#) Integration test for multi-get calls
- [HBASE-10734](#) Fix RegionStates.getRegionAssignments to not add duplicate regions
- [HBASE-10729](#) Enable table doesn't balance out replicas evenly if the replicas were unassigned earlier
- [HBASE-10720](#) rpcClient: Wrong log level when closing the connection
- [HBASE-10688](#) Add a draining_node script to manage nodes in draining mode
- [HBASE-10704](#) BaseLoadBalancer#roundRobinAssignment() may add same region to assignment plan multiple times

- [HBASE-10633](#) StoreFileRefresherChore throws ConcurrentModificationException sometimes
- [HBASE-10572](#) Create an IntegrationTest for region replicas.
- [HBASE-10703](#) TestAsyncProcess does not pass on
- [HBASE-10070](#) [HBASE-10637](#) rpcClient: Setup the iostreams when writing
- [HBASE-10635](#) thrift#TestThriftServer fails due to TTL validity check
- [HBASE-10620](#) LoadBalancer.needsBalance() should check for co-located region replicas as well
- [HBASE-10672](#) Table snapshot should handle tables whose REGION_REPLICATION is greater than one.
- [HBASE-10591](#) Sanity check table configuration in createTable
- [HBASE-10661](#) TestStochasticLoadBalancer.testRegionReplicationOnMidClusterWithRacks() is flaky
- [HBASE-10351](#) LoadBalancer changes for supporting region replicas
- [HBASE-10630](#) NullPointerException in ConnectionManager.locateRegionInMeta() due to missing region info
- [HBASE-10356](#) Failover RPC's for multi-get.
- [HBASE-10525](#) Allow the client to use a different thread for writing to ease interrupt.
- [HBASE-10355](#) Failover RPC's from client using region replicas.
- [HBASE-10352](#) Region and RegionServer changes for opening region replicas, and refreshing store files
- [HBASE-10351](#) LoadBalancer changes for supporting region replicas.
- [HBASE-10359](#) Master/RS WebUI changes for region replicas.
- [HBASE-10362](#) HBCK changes for supporting region replicas.
- [HBASE-10361](#) Enable/AlterTable support for region replicas.
- [HBASE-10350](#) Master/AM/RegionStates changes to create and assign region replicas.
- [HBASE-10490](#) Simplify RpcClient code
- [HBASE-10517](#) NPE in MetaCache.clearCache()
- [HBASE-10479](#) HConnection interface is public but is used internally, and contains a bunch of methods
- [HBASE-10348](#) HTableDescriptor changes for region replicas
- [HBASE-10354](#) Add an API for defining consistency per request

- [HBASE-10347](#) HRegionInfo changes for adding replicaId and MetaEditor/MetaReader changes for region replicas
- [HBASE-10277](#) refactor AsyncProcess
- [HBASE-10427](#) clean up HRegionLocation/ServerName usage
- [HBASE-10472](#) Manage the interruption in ZKUtil#getData

1.7.7. Hive 0.14.0

- [HIVE-8947](#) HIVE-8876 also affects Postgres < 9.2
- [HIVE-8901](#) increase retry attempt, interval on metastore database errors
- [HIVE-8890](#) HiveServer2 dynamic service discovery: use persistent ephemeral nodes curator recipe
- [HIVE-8880](#) non-synchronized access to split list in OrInputFormat
- [HIVE-8876](#) incorrect upgrade script for Oracle (13->14)
- [HIVE-8875](#) hive.optimize.sort.dynamic.partition should be turned off for ACID
- [HIVE-8813](#) Allow tests to be excluded based on pattern/regex
- [HIVE-8880](#) non-synchronized access to split list in OrInputFormat
- [HIVE-8830](#) hcatalog process don't exit because of non daemon thread
- [HIVE-8812](#) TestMinimrCliDriver failure if run in the same command as TestHBaseNegativeCliDriver
- [HIVE-8811](#) Dynamic partition pruning can result in NPE during query compilation
- [HIVE-8805](#) CBO skipped due to SemanticException: Line 0:-1 Both left and right aliases encountered in JOIN 'avg_cs_ext_discount_amt'
- [HIVE-8801](#) Make orc_merge_incompat1.q deterministic across platforms
- [HIVE-8797](#) Simultaneous dynamic inserts can result in "partition already exists" error
- [HIVE-8715](#) Hive 14 upgrade scripts can fail for statistics if database was created using auto-create
- [HIVE-8374](#) schematool fails on Postgres versions < 9.2
- [HIVE-8317](#) WebHCat pom should explicitly depend on jersey-core
- [HIVE-8266](#) create function using <resource> statement compilation should include resource URI entity
- [HIVE-8182](#) beeline fails when executing multiple-line queries with trailing spaces
- [HIVE-8130](#) Support Date in Avro

- [HIVE-8113](#) Derby server fails to start on windows
- [HIVE-6148](#) Support arbitrary structs stored in HBase

1.7.8. Knox 0.6.0

- [KNOX-470](#) Add README to Samples and Documentation
- [KNOX-468](#) Add default config to optimize LDAP group lookup
- [KNOX-467](#) Unit tests failing on windows
- [KNOX-466](#) Log exception stack traces at INFO level when they reach gateway servlet
- [KNOX-465](#) Initial audit record can contain leftover principal name
- [KNOX-464](#) Location headers have wrong hostname when used behind load balancer
- [KNOX-459](#) Apache Knox appears to be leaking sockets

1.7.9. Mahout 0.9.0

- [MAHOUT-1464](#) Cooccurrence Analysis on Spark
- [MAHOUT-1578](#) Optimizations in matrix serialization
- [MAHOUT-1572](#) blockify() to detect (naively) the data sparsity in the loaded data
- [MAHOUT-1571](#) Functional Views are not serialized as dense/sparse correctly
- [MAHOUT-1566](#) (Experimental) Regular ALS factorizer with conversion tests, optimizer enhancements and bug fixes
- [MAHOUT-1537](#) Minor fixes to spark-shell
- [MAHOUT-1529](#) Finalize abstraction of distributed logical plans from backend operations
- [MAHOUT-1489](#) Interactive Scala & Spark Bindings Shell & Script processor
- [MAHOUT-1346](#) Spark Bindings
- [MAHOUT-1555](#) Exception thrown when a test example has the label not present in training examples
- [MAHOUT-1446](#) Create an intro for matrix factorization
- [MAHOUT-1480](#) Clean up website on 20 newsgroups
- [MAHOUT-1561](#) cluster-syntheticcontrol.sh not running locally with MAHOUT_LOCAL=true
- [MAHOUT-1558](#) Clean up classify-wiki.sh and add in a binary classification problem
- [MAHOUT-1560](#) Last batch is not filled correctly in MultithreadedBatchItemSimilarities

- [MAHOUT-1554](#) Provide more comprehensive classification statistics
- [MAHOUT-1548](#) Fix broken links in quickstart webpage
- [MAHOUT-1542](#) Tutorial for playing with Mahout's Spark shell
- [MAHOUT-1533](#) Remove Frequent Pattern Mining
- [MAHOUT-1532](#) Add solve() function to the Scala DSL
- [MAHOUT-1530](#) Custom prompt and welcome message for the Spark Shell
- [MAHOUT-1527](#) Fix wikipedia classifier example
- [MAHOUT-1526](#) Ant file in examples
- [MAHOUT-1523](#) Remove @author tags in sparkbindings
- [MAHOUT-1521](#) lucene2seq - Error trying to load data from stored field (when non-indexed)
- [MAHOUT-1520](#) Fix links in Mahout website documentation
- [MAHOUT-1519](#) Remove StandardThetaTrainer
- [MAHOUT-1517](#) Remove casts to int in ALSWRFactorizer
- [MAHOUT-1513](#) Deprecate Canopy Clustering
- [MAHOUT-1511](#) Renaming core to mrlegacy
- [MAHOUT-1510](#) Goodbye MapReduce
- [MAHOUT-1509](#) Invalid URL in link from "quick start/basics" page
- [MAHOUT-1508](#) Performance problems with sparse matrices
- [MAHOUT-1505](#) structure of clusterdump's JSON output
- [MAHOUT-1504](#) Enable/fix thetaSummer job in TrainNaiveBayesJob
- [MAHOUT-1503](#) TestNaiveBayesDriver fails in sequential mode
- [MAHOUT-1502](#) Update Naive Bayes Webpage to Current Implementation
- [MAHOUT-1501](#) ClusterOutputPostProcessorDriver has private default constructor
- [MAHOUT-1498](#) DistributedCache.setCacheFiles in DictionaryVectorizer overwrites jars pushed using oozie
- [MAHOUT-1497](#) mahout resplit not producing splited files
- [MAHOUT-1496](#) Create a website describing the distributed ALS recommender
- [MAHOUT-1491](#) Spectral KMeans Clustering doesn't clean its /tmp dir and fails when seeing it again

- [MAHOUT-1488](#) DisplaySpectralKMeans fails: examples/output/clusteredPoints/part-m-00000 does not exist
- [MAHOUT-1483](#) Organize links in web site navigation bar
- [MAHOUT-1482](#) Rework quickstart website
- [MAHOUT-1476](#) Cleanup website on Hidden Markov Models
- [MAHOUT-1475](#) Cleanup website on Naive Bayes
- [MAHOUT-1472](#) Cleanup website on fuzzy kmeans
- [MAHOUT-1471](#) Cleanup website for Canopy clustering
- [MAHOUT-1468](#) Creating a new page for StreamingKMeans documentation on mahout website
- [MAHOUT-1467](#) ClusterClassifier readPolicy leaks file handles
- [MAHOUT-1466](#) Cluster visualization fails to execute
- [MAHOUT-1465](#) Clean up README
- [MAHOUT-1463](#) Modify OnlineSummarizers to use the TDigest dependency from Maven Central
- [MAHOUT-1460](#) Remove reference to Dirichlet in ClusterIterator
- [MAHOUT-1459](#) Move Hadoop related code out of CanopyClusterer
- [MAHOUT-1458](#) Remove KMeansConfigKeys and FuzzyKMeansConfigKeys
- [MAHOUT-1457](#) Move EigenSeedGenerator into spectral kmeans package
- [MAHOUT-1455](#) Forkcount config causes JVM crashes during build
- [MAHOUT-1451](#) Cleaning up the examples for clustering on the website
- [MAHOUT-1450](#) Cleaning up clustering documentation on mahout website
- [MAHOUT-1449](#) Update the Known Issues in Random Forests Page
- [MAHOUT-1448](#) In Random Forest, the training does not support multiple input files. The input dataset must be one single file.
- [MAHOUT-1447](#) ImplicitFeedbackAlternatingLeastSquaresSolver tests and features
- [MAHOUT-1445](#) Create an intro for item based recommender
- [MAHOUT-1440](#) Add option to set the RNG seed for initial cluster generation in Kmeans/fkmeans
- [MAHOUT-1438](#) "quickstart" tutorial for building a simple recommender
- [MAHOUT-1434](#) Dead links on the web site

- [MAHOUT-1433](#) Make SVDRecommender look at all unknown items of a user per default
- [MAHOUT-1429](#) Parallelize YtransposeY in ImplicitFeedbackAlternatingLeastSquaresSolver
- [MAHOUT-1428](#) Recommending already consumed items
- [MAHOUT-1425](#) SGD classifier example with bank marketing dataset.
- [MAHOUT-1420](#) Add solr-recommender to examples
- [MAHOUT-1419](#) Random decision forest is excessively slow on numeric features
- [MAHOUT-1417](#) Random decision forest implementation fails in Hadoop 2
- [MAHOUT-1416](#) Make access of DecisionForest.read(dataInput) less restricted
- [MAHOUT-1415](#) Clone method on sparse matrices fails if there is an empty row which has not been set explicitly
- [MAHOUT-1413](#) Rework Algorithms page
- [MAHOUT-1388](#) Add command line support and logging for MLP
- [MAHOUT-1385](#) Caching Encoders don't cache
- [MAHOUT-1356](#) Ensure unit tests fail fast when writing outside mvn target directory
- [MAHOUT-1329](#) Mahout for hadoop 2
- [MAHOUT-1310](#) Mahout support windows

1.7.10. Oozie 4.1.0

- [OOZIE-2051](#) Allows multiple default action configuration files per action
- [OOZIE-2013](#) Bundle job with children status of "KILLED" and "FAILED" should transition to "KILLED" instead of "DONEWITHERROR"
- [OOZIE-2012](#) coordinator with an invalid cron frequency throws NPE after validation
- [OOZIE-2011](#) In non-secure environment, oozie fails "with E0508: User [?] not authorized for WF job" when killing a job
- [OOZIE-1814](#) Oozie should mask "oozie.https.keystore.pass" in instrumentation log
- [OOZIE-1726](#) Oozie does not support _HOST when configuring kerberos security
- [OOZIE-1561](#) When using Oozie HA, the logs should also be HA

1.7.11. Phoenix 4.2.0

- [PHOENIX-1442](#) Alter Index double normalize Index Table Name
- [PHOENIX-1434](#) Stats are not maintained correctly through splits

- [PHOENIX-1416](#) Given a schema name, DatabaseMetadata.getTables and getColumnns calls erroneously match tables without schema
- [PHOENIX-1406](#) Use preCompact hook instead of preCompactScannerOpen for stats collection
- [PHOENIX-1405](#) Problem referencing lower-case column names with Phoenix / Pig / Spark
- [PHOENIX-1404](#) Ignore call to ResultSet#setFetchSize
- [PHOENIX-1403](#) Correct synchronization in ConnectionQueryServicesImpl.init
- [PHOENIX-1402](#) Don't recalculate stats on split
- [PHOENIX-1401](#) SYSTEM.SEQUENCE table is not pre-split as expected
- [PHOENIX-1400](#) Copy small attribute in ScanUtil
- [PHOENIX-1397](#) RVC combined with OR on first row key column results in NPE
- [PHOENIX-1396](#) Avoid unnecessary ResultSpooler.bin files creation/deletion every time SpoolingResultIterator
- [PHOENIX-1395](#) ResultSpooler spill files are left behind in /tmp folder
- [PHOENIX-1346](#) Base exception gets wrapped as incompatible jar exception

1.7.12. Pig 0.14.0

- [PIG-4138](#) Upgrade hbase to hbase-0.98.4

1.7.13. Ranger 0.4.0 (formerly XASecure)

- [RANGER-186](#) Improve failure handling in usersync service
- [RANGER-185](#) Optimize database transaction usage in admin web application
- [RANGER-183](#) Search policies public API call failing in Oracle DB
- [RANGER-182](#) Date format for Audit log is incorrect.
- [RANGER-180](#) Ranger lookup for hadoop repository fails when wire encryption is on
- [RANGER-158](#) SSL service should not accept SSLv3 protocol (due to CVE-2014-3566)

1.7.14. Sqoop 1.4.5

- [SQOOP-1759](#) TestIncrementalImport fails with NPE on Windows
- [SQOOP-1540](#) Accumulo unit tests fail with Accumulo 1.6.1 because of conflicts in libthrift libraries
- [SQOOP-1539](#) Empty partition keys and values in multiple partition key hcatalog usage should be validated

- [SQOOP-1519](#) Enable HCat/HBase/Accumulo operations with OraOop connection manager
- [SQOOP-1474](#) Fix usage of StringUtils.repeat method
- [SQOOP-1471](#) Use Hadoop CredentialProvider API to encrypt passwords at rest
- [SQOOP-1400](#) Failed to import data using mysql-connector-java-5.1.17.jar

1.7.15. Storm 0.9.3

- [STORM-216](#) Secure Multi-tenant Storm

1.7.16. Tez 0.5.2

- [TEZ-1774](#) AppLaunched event for Timeline does not have start time set.
- [TEZ-1770](#) Handle ConnectExceptions correctly when establishing connections to an NM which may be down.
- [TEZ-1761](#) TestRecoveryParser::testGetLastInProgressDAG fails in similar manner to TEZ-1686.
- [TEZ-1758](#) TezClient should provide YARN diagnostics when the AM crashes
- [TEZ-1750](#) Add a DAGScheduler which schedules tasks only when sources have been scheduled.
- [TEZ-1749](#) Increase test timeout for TestLocalMode.testMultipleClientsWithSession
- [TEZ-1745](#) TestATSHistoryLoggingService::testATSHistoryLoggingServiceShutdown can be flaky.
- [TEZ-1747](#) Increase test timeout for TestSecureShuffle.
- [TEZ-1746](#) Flaky test in TestVertexImpl and TestExceptionPropagation.
- [TEZ-1742](#) Improve response time of internal preemption.

1.7.17. Zookeeper 3.4.6

- [ZOOKEEPER-2064](#) Prevent resource leak in various classes
- [ZOOKEEPER-2053](#) Make scripts use ZOOKEEPER_HOME if set.
- [ZOOKEEPER-1926](#) Unit tests should only use build/test/data for data
- [ZOOKEEPER-1897](#) ZK Shell/Cli not processing commands
- [ZOOKEEPER-1876](#) Add support for installing windows services in .cmd scripts
- [ZOOKEEPER-1888](#) ZkCli.cmd commands fail with "'java' is not recognized as an internal or external command"

- [ZOOKEEPER-1848](#) [WINDOWS] Java NIO socket channels does not work with Windows ipv6 on JDK6
- [ZOOKEEPER-1791](#) ZooKeeper package includes unnecessary jars that are part of the package.
- [ZOOKEEPER-1575](#) adding .gitattributes to prevent CRLF and LF mismatches for source and text files
- [ZOOKEEPER-1574](#) Set svn:eol-style property to native.

1.8. Known Issues for HDP 2.2

HDP 2.2.0 has the following known issues, scheduled for resolution in a future release. Where available, a workaround has been provided.

1.8.1. Debian Known Issues

- [BUG-19351](#): Zookeeper does not have shell access on Ubuntu and Debian Hosts.

Description: The `/etc/passwd` file has no shell access for Zookeeper:

```
zookeeper:x:108:115:ZooKeeper User,,,:/var/lib/zookeeper:/bin/false
```

Workaround: Modify the zookeeper user to have shell access. For example: `usermod zookeeper -s /bin/bash`

- [BUG-28102](#): Update to headers needed for `/etc/init.d/ranger-admin` and `/etc/init.d/ranger-usersyncscripts` after Ranger install on Debian 6.

Problem: The init scripts installed by Ranger for admin and usersync are missing a comment block at the beginning (details <https://wiki.debian.org/LSBInitScripts/>), resulting in error messages.

Workaround: Add the following header to these scripts:

```
### BEGIN INIT INFO
# Provides:          scriptname
# Required-Start:    $remote_fs $syslog
# Required-Stop:     $remote_fs $syslog
# Default-Start:     2 3 4 5
# Default-Stop:      0 1 6
# Short-Description: Start daemon at boot time
# Description:       Enable service provided by daemon.
### END INIT INFO
```

1.8.2. Falcon Known Issues

- [BUG-26944](#): E0803: IO error, null during scheduling feed on a cluster with wire encryption on.

Problem: Falcon has difficulty writing to target clusters with wire encryption on. The ssl-client on the CP must be valid for doing SSL negotiation with the target cluster.

Workaround: Have Falcon write to target clusters with wire encryption disabled.

- BUG-25179: Falcon's default port is 15443 if TLS is enabled, 15000 otherwise.

Problem: Falcon server is on port 15443 or 15000 based on setting for TLS. In Falcon startup.properties:

- If falcon.enableTLS is set to true explicitly or not set at all, falcon starts at port 15443 on https:// by default.
- If falcon.enableTLS is set to false, falcon starts at port 15000 on http://.

Workaround: To change the port, use -port option. If falcon.enableTLS is not set explicitly but port is set explicitly, port that ends with 443 will automatically put falcon on https://. Any other port will put falcon on http://.

- BUG-25179: You must add your own keystore to `/etc/falcon/conf/` directory as `prism.keystore`, when `falcon.enableTLS` is set to true.
- BUG-28055: Ambari currently configures the config store to local fs in `"*.config.store.uri"` (startup properties) and `"Falcon store URI"` (falcon server).

```
file:///hadoop/falcon/store
```

It is best to write to HDFS. In Ambari, modify your Falcon config to store to HDFS.

Manage the Falcon service > Select Config > in Falcon Store URI, specify a link to HDFS. For example:

```
*.config.store.uri=hdfs://ip-172-31-13-179.ec2.internal:8020/apps/falcon
```

1.8.3. Hadoop Common/HDFS Known Issues

- BUG-38088, BUG-36247, BUG-38009: DataNode restart fails during Rolling Upgrade from 2.2.0-2.2.6 to 2.3.x

Problem: DataNode restart fails during Rolling Upgrade from 2.2.0-2.2.6 to 2.3.x. Not all writers have responder running, but `sendOOB()` tries anyway. This causes NPE and the shutdown thread dies, halting the shutdown after only shutting down `DataXceiverServer`

Workaround: Skip the failed datanodes, downgrade them and try to upgrade them again.

Workaround: Manually restart the failed datanodes.

- BUG-30030: Incomplete installation of `hadoop-httpfs`.

Problem: `hadoop-httpfs` RPM scripts are incomplete for HDP 2.2. This affects proxy setup that allows Hue to interact with HA clusters.

Workaround: Have Falcon write to target clusters with wire encryption disabled.

Workaround: The following steps should be executed on the node that will be hosting the HttpFS service. This assumes that HDP 2.2 has already been deployed and configured.

1. Install the `hadoop_2_2_0_0_2041-httpfs` package:

```
yum install hadoop-httpfs
```

2. Create a symlink in `/usr/lib` to the location where `httpfs` is installed:

```
ln -s /usr/hdp/current/hadoop-client/./hadoop-httpfs /usr/lib/hadoop-httpfs
```

3. Create a symlink to `libexec`:

```
ln -s /usr/hdp/current/hadoop-client/./hadoop/libexec /usr/lib/hadoop-httpfs/libexec
```

4. Create configuration directories and copy the default set of configurations:

```
mkdir -p /etc/hadoop-httpfs/conf
mkdir -p /etc/hadoop-httpfs/tomcat-deployment/conf
cp -r /usr/hdp/2.2.0.0-2041/etc/hadoop-httpfs/conf.empty/* /etc/hadoop-httpfs/conf/
cp -r /usr/hdp/2.2.0.0-2041/etc/hadoop-httpfs/tomcat-deployment.dist/conf/* /etc/hadoop-httpfs/tomcat-deployment/conf
```

5. Enable the `init.d` script for `HttpFS` by creating the following symlink:

```
ln -s /usr/hdp/2.2.0.0-2041/etc/rc.d/init.d/hadoop-httpfs /etc/init.d/hadoop-httpfs
```

6. Create the following symlinks to point to the Tomcat libraries and binary scripts that `HttpFS` will use:

```
ln -s /usr/lib/bigtop-tomcat/lib /etc/hadoop-httpfs/tomcat-deployment/
libln -s /usr/lib/bigtop-tomcat/bin /etc/hadoop-httpfs/tomcat-deployment/bin
```

7. Start the `HttpFS` server:

```
service hadoop-httpfs start
```

1.8.4. HBase Known Issues

- BUG-26592: Multiple tests are failing because of System time goes back frequently on SLES

Problem: SUSE 11 SP3 clusters running on Amazon EC2 have had the system clock frequently going back (hundreds of ms), which causes multiple issues in HBase. The HBase data model assumes that timestamps are monotonically increasing, and failing that may result in updates being eclipsed by previous mutations.

Workaround: Setup NTP and ensure that system clock time does not drift when running HBase. See <https://hbase.apache.org/book.html#basic.prerequisites> for more details.

- BUG-23981 [Windows]: IOException: Invalid HFile block magic in Windows unit tests

If you use HBase on a local filesystem (not HDFS) on Windows for single node non-distributed clusters, concurrent hfile readers might return data belonging to a different offset than what was requested, resulting in read failures.

1.8.5. HDFS Known Issues

- BUG-26890: Commands in HA mode behave differently compared to non-HA

Problem: Commands in HA mode behave differently compared to non-HA. For example:

```
hdfs dfsadmin -safemode enter - if nn2 is active and nn1 is standby, command will run with no errors, but it will set standby to safemode and not active. If nn1 is actually off, the command will try nn2 and the command in effect will do what it needs to do.
```

The same behavior is true for `hdfs dfsadmin -saveNamespace`.

Workaround: You can add the `fs` and specify `hdfs://hostname:8020` of the active namenode, for example: `hdfs dfsadmin -fs hdfs://<namenodehostactive>:8020 -saveNamespace`.

1.8.6. Hive Known Issues

- BUG-28161, BUG-28234: Hive Server2 Long running test failed after 44 hours with OutOfMemory

Problem: Hive Server 2 out of memory due to FileSystem.CACHE leak

Workaround: To prevent memory leaks in unsecure mode, disable file system caches by setting the following parameters to true in hive configuration (hive-site.xml).

`fs.hdfs.impl.disable.cache` – Disable HDFS filesystem cache, default false.

`fs.file.impl.disable.cache` – Disable local filesystem cache, default false.

- BUG-27913 Error while upgrading Hive Metastore schema for Oracle

Problem: The pre-upgrade script causes an error when upgrading Hive Metastore using an Oracle DB. For example, after executing the command `-upgradeSchema`, the following error message occurs:

```
root@ip-172-31-42-3 ~# /usr/hdp/2.2.0.0-2036/hive/bin/schematool -
upgradeSchema -dbType oracle
14/11/17 14:11:38 WARN conf.HiveConf: HiveConf of name
hive.optimize.mapjoin.mapreduce does not exist
14/11/17 14:11:38 WARN conf.HiveConf: HiveConf of name hive.heapsize
does not exist
14/11/17 14:11:38 WARN conf.HiveConf: HiveConf of name
hive.server2.enable.impersonation does not exist
14/11/17 14:11:38 WARN conf.HiveConf: HiveConf of name
hive.semantic.analyzer.factory.impl does not exist
14/11/17 14:11:38 WARN conf.HiveConf: HiveConf of name
hive.auto.convert.sortmerge.join.noconditionaltask does not exist
Metastore connection URL: jdbc:oracle:thin:@//ip-172-31-42-
1.ec2.internal:1521/XE
Metastore Connection Driver : oracle.jdbc.driver.OracleDriver
Metastore connection User: hiveuser
Starting upgrade metastore schema from version 0.13.0 to 0.14.0
Upgrade script upgrade-0.13.0-to-0.14.0.oracle.sql
Error: ORA-00955: name is already used by an existing object
```

```
(state=42000,code=955)
Warning in pre-upgrade script pre-0-upgrade-0.13.0-to-
0.14.0.oracle.sql: Schema script failed, errorcode 2
Completed upgrade-0.13.0-to-0.14.0.oracle.sql
schemaTool completed
```

Workaround: Ignore the error message. The schema tool has upgraded.

- **BUG-27637: Postgres Metastore has intermittent test failure due to "ERROR: could not serialize access due to read/write dependencies among transactions"**

Problem: Sometimes the acid_concurrency test on Postgres Metastore test fails with this error:

```
ERROR: could not serialize access due to read/write dependencies among
transactions
Detail: Reason code: Canceled on identification as a pivot, during write.
Hint: The transaction might succeed if retried.
at org.postgresql.core.v3.QueryExecutorImpl.
receiveErrorResponse(QueryExecutorImpl.java:2198)
at org.postgresql.core.v3.QueryExecutorImpl.
processResults(QueryExecutorImpl.java:1927)
[...]
ERROR: could not serialize access due to read/write dependencies among
transactions
Detail: Reason code: Canceled on identification as a pivot, during write.
Hint: The transaction might succeed if retried.
org.postgresql.core.v3.QueryExecutorImpl.
receiveErrorResponse(QueryExecutorImpl.java:2198)
org.postgresql.core.v3.QueryExecutorImpl.processResults(QueryExecutorImpl.
java:1927)
[...]
ERROR [HiveServer2-Background-Pool: Thread-392]: SessionState (SessionState.
java:printError(833)) - Execution has failed.
2014-11-12 08:40:57,813
INFO [HiveServer2-Background-Pool: Thread-392]: log.PerfLogger (PerfLogger.
java:PerfLogEnd(135))
[...]
ERROR [HiveServer2-Background-Pool: Thread-392]: ql.Driver (SessionState.
java:printError(833)) - FAILED: Execution Error, return code 1 from org.
apache.hadoop.hive.ql.exec.tez.TezTask
2014-11-12 08:40:57,869
INFO [HiveServer2-Background-Pool: Thread-392]: log.PerfLogger (PerfLogger.
java:PerfLogEnd(135))
[...]
```

- **BUG-27636 Oracle Metastore: intermittent acid_concurrency test failures due to NoSuchLockException**

```
ERROR [HiveServer2-Background-Pool: Thread-1229]:
metastore.RetryingHMSHandler (RetryngHMSHandler.java:invoke(141)) -
NoSuchLockException(message:No such lock: 59) at org.apache.hadoop.hive.
metastore.txn.
TxnHandler.heartbeatLock(TxnHandler.java:1532) at org.apache.hadoop.hive.
metastore.txn.
TxnHandler.heartbeat(TxnHandler.java:608)
[...]
```

- **BUG-27197: MatchPath not available in HDP 2.2.**

1.8.10. Phoenix Known Issues

- BUG-26661: Windows runs failed with "region isn't co-located with its data" exception

Problem: The Local Index feature is considered experimental and should not be enabled at this time, except for preview purposes.

- BUG-28226: Error 504 after upgrading from HDP 2.1 to HDP 2.2.

Problem: After upgrading from HDP 2.1 to HDP 2.2, queries such as the following generate an ERROR 504: `./psql.py ip-172-31-43-221.ec2.internal:2181 /grid/0/hdp/2.2.0.0-2041/phoenix/doc/examples/WEB_STAT.sql /grid/0/hdp/2.2.0.0-2041/phoenix/doc/examples/WEB_STAT.csv /grid/0/hdp/2.2.0.0-2041/phoenix/doc/examples/WEB_STAT_QUERIES.sql`.

Error detail: `org.apache.phoenix.schema.ColumnNotFoundException: ERROR 504 (42703): Undefined column. columnName=INDEX_TYPE`

Workaround: Follow instructions in the "Manual Upgrade to HDP 2.2" document, "Configure Phoenix" section, step 4: replace the client jar file before connecting the new Phoenix client to the Phoenix cluster.

1.8.11. Pig Known Issues

- Nested fields will experience slower performance because they are not currently supported by predicate pushdown in Pig.

1.8.12. Ranger (formerly XA Secure) Known Issues

- BUG-28102: Update to headers needed for `/etc/init.d/ranger-admin` and `/etc/init.d/ranger-usersyncscripts` after Ranger install on Debian 6.

Problem: The init scripts installed by Ranger for admin and usersync are missing a comment block at the beginning (details <https://wiki.debian.org/LSBInitScripts/>), resulting in error messages.

Workaround: Add the following header to these scripts:

```
### BEGIN INIT INFO
# Provides:          scriptname
# Required-Start:    $remote_fs $syslog
# Required-Stop:     $remote_fs $syslog
# Default-Start:     2 3 4 5
# Default-Stop:      0 1 6
# Short-Description: Start daemon at boot time
# Description:       Enable service provided by daemon.
### END INIT INFO
```

1.8.13. Sqoop Known Issues

- BUG-25282: `j.l.ArrayIndexOutOfBoundsException` using `-map-column-hive`

Problem: Running this command with the `--map-column-hive` statement:

```
sqoop import --verbose --connect
'jdbc:mysql://sandbox.hortonworks.com/demo' --table customer_address --
username carter --password password --create-hcatalog-table --hcatalog-
table customer_address --hcatalog-storage-stanza "stored as orc" --map-
column-hive fdsa -m 1
```

Returns:

```
2014-10-17 21:49:27,597 DEBUG sqoop.Sqoop (Sqoop.java:run(137)) - 1
java.lang.ArrayIndexOutOfBoundsException: 1
at org.apache.sqoop.SqoopOptions.parseColumnMapping(SqoopOptions.java:1196)
at org.apache.sqoop.SqoopOptions.setMapColumnHive(SqoopOptions.java:1201)
at org.apache.sqoop.tool.BaseSqoopTool.applyHiveOptions(BaseSqoopTool.
java:1111)
at org.apache.sqoop.tool.ImportTool.applyOptions(ImportTool.java:961)
at org.apache.sqoop.tool.SqoopTool.parseArguments(SqoopTool.java:433)
at org.apache.sqoop.Sqoop.run(Sqoop.java:131)
at org.apache.hadoop.util.ToolRunner.run(ToolRunner.java:70)
at org.apache.sqoop.Sqoop.runSqoop(Sqoop.java:179)
at org.apache.sqoop.Sqoop.runTool(Sqoop.java:218)
at org.apache.sqoop.Sqoop.runTool(Sqoop.java:227)
at org.apache.sqoop.Sqoop.main(Sqoop.java:236)
```

There is no `fdsa` column. The command works without the `--map-column-hive` statement.

Workaround: Sqoop is expecting comma separated list of mapping in form `<name of column>=<new type>`. For example: `$ sqoop import ... --map-column-java id=String,value=Integer`

1.8.14. Ubuntu Known Issues

- BUG-19351: Zookeeper does not have shell access on Ubuntu and Debian Hosts.

Description: The `/etc/passwd` file has no shell access for zookeeper:

```
zookeeper:x:108:115:ZooKeeper User,,,:/var/lib/zookeeper:/bin/false
```

Workaround: Modify the zookeeper user to have shell access. For example:

```
usermod zookeeper -s /bin/bash
```

1.8.15. YARN Known Issues

- BUG-35942: Users must manually configure ZooKeeper security with ResourceManager High Availability.
- BUG-27604: After upgrade from 2.1 of Highly Available system, ResourceManager fails to elect a master.

Problem: After upgrading an HA system from HDP 2.2 from HDP 2.1, you must manually clear the ResourceManager state store as part of the upgrade or the following error message will occur:

```
Exception transitioning to active PERMISSIONS=All users are allowed
2014-11-12 05:36:04,941 WARN ha.ActiveStandbyElector
(ActiveStandbyElector.java:becomeActive(809)) - Exception handling the
winning of election
org.apache.hadoop.ha.ServiceFailedException: RM could not transition to
Active at org.apache.hadoop.yarn.server.resourcemanager.
EmbeddedElectorService.
becomeActive(EmbeddedElectorService.java:128)
[...]
```

Workaround: Manually clear the ResourceManager state store:

1. Run:

```
yarn resourcemanager -format-state-store
```

2. Start the ResourceManager:

```
su -l yarn -c "/usr/hdp/current/hadoop-yarn-
resourcemanager/sbin/yarn-daemon.sh start resourcemanager"
```

1.8.16. ZooKeeper Known Issues

- **BUG-19351:** Zookeeper does not have shell access on Ubuntu and Debian Hosts.

Description: The /etc/passwd file has no shell access for Zookeeper:

```
zookeeper:x:108:115:ZooKeeper User,,,:/var/lib/zookeeper:/bin/false
```

Workaround: Modify the zookeeper user to have shell access. For example:

```
usermod zookeeper -s /bin/bash
```

- **BUG-28102:** Update to headers needed for /etc/init.d/ranger-admin and /etc/init.d/ranger-usersyncscripts after Ranger install on Debian 6.

Problem: The init scripts installed by Ranger for admin and usersync are missing a comment block at the beginning (details <https://wiki.debian.org/LSBInitScripts/>), resulting in error messages.

Workaround: Add the following header to these scripts:

```
### BEGIN INIT INFO
# Provides:          scriptname
# Required-Start:    $remote_fs $syslog
# Required-Stop:     $remote_fs $syslog
# Default-Start:     2 3 4 5
# Default-Stop:      0 1 6
# Short-Description: Start daemon at boot time
# Description:       Enable service provided by daemon.
### END INIT INFO
```