TezConfiguration

Property Name	Default Value	Description	Type	Is Private?	Is Unstable?	Is Evolving?
tez.dag.recovery.enabled	true	Boolean value. Enable recovery of DAGs. This allows a restarted app master to recover the incomplete DAGs from the previous instance of the app master.	boolean	false	false	false
tez.dag.recovery.io.buffer.size	8192	Int value. Size in bytes for the IO buffer size while processing the recovery file. Expert level setting.	integer	false	false	false
tez.dag.recovery.flush.interval.secs	30	Int value. Interval, in seconds, between flushing recovery data to the recovery log.	integer	false	false	false
tez.dag.recovery.max.unflushed.events	100	Int value. Number of recovery events to buffer before flushing them to the recovery log.	integer	false	false	false
tez.task.heartbeat.timeout.check-ms	30000	Int value. Time interval, in milliseconds, between checks for lost tasks. Expert level setting.	integer	false	false	false
tez.task.timeout-ms	300000	Int value. Time interval, in milliseconds, within which a task must heartbeat to the app master before its considered lost. Expert level setting.	integer	false	false	false
tez.am.acls.enabled	true	Boolean value. Configuration to enable/disable ACL checks.	boolean	false	false	false
tez.allow.disabled.timeline-domains	false	Boolean value. Allow disabling of Timeline Domains even if Timeline is being used.	boolean	true	false	false
tez.am.client.am.port-range	null	String value. Range of ports that the AM can use when binding for client connections. Leave blank to use all possible ports. Expert level setting. It's hadoop standard range configuration. For example 50000-50050,50100-50200	string	false	false	false
tez.am.client.heartbeat.timeout.secs	-1	Int value. Time interval (in seconds). If the Tez AM does not receive a heartbeat from the client within this time interval, it will kill any running DAG and shut down. Required to re-cycle orphaned Tez applications where the client is no longer alive. A negative value can be set to disable this check. For a positive value, the minimum value is 10 seconds. Values between 0 and 10 seconds will be reset to the minimum value. Only relevant in session mode. This is disabled by default i.e. by default, the Tez AM will go on to complete the DAG and only kill itself after hitting the DAG submission timeout defined by {@link #TEZ_SESSION_AM_DAG_SUBMIT_TIMEOUT_SECS}	integer	false	false	false
tez.am.client.am.thread-count	2	Int value. Number of threads to handle client RPC requests. Expert level setting.	integer	false	false	false
tez.am.commit-all-outputs-on-dag-success	true	Boolean value. Determines when the final outputs to data sinks are committed. Commit is an output specific operation and typically involves making the output visible for consumption. If the config is true, then the outputs are committed at the end of DAG completion after all constituent vertices have completed. If false, outputs for each vertex are committed after that vertex succeeds. Depending on the desired output visibility and downstream consumer dependencies this value must be appropriately chosen. Defaults to the safe choice of true.	boolean	false	false	false
tez.am.containerlauncher.thread-count-limit	500	Int value. Upper limit on the number of threads user to launch containers in the app master. Expert level setting.	integer	false	false	false
tez.am.container.idle.release-timeout-max.millis	10000	Int value. The maximum amount of time to hold on to a container if no task can be assigned to it immediately. Only active when reuse is enabled. The value must be +ve and >= TezConfiguration#TEZ_AM_CONTAINER_IDLE_RELEASE_TIMEOUT_MIN_MILLIS. Containers will have an expire time set to a random value between TezConfiguration#TEZ_AM_CONTAINER_IDLE_RELEASE_TIMEOUT_MIN_MILLIS && TezConfiguration#TEZ_AM_CONTAINER_IDLE_RELEASE_TIMEOUT_MAX_MILLIS. This creates a graceful reduction in the amount of idle resources held	long	false	false	false
tez.am.container.idle.release-timeout-min.millis	5000	Int value. The minimum amount of time to hold on to a container that is idle. Only active when reuse is enabled. Set to -1 to never release idle containers (not recommended).	integer	false	false	false
tez.am.container.reuse.enabled	true	Boolean value. Configuration to specify whether container should be reused across tasks. This improves performance by not incurring recurring launch overheads.	boolean	false	false	false
tez.am.container.reuse.locality.delay-allocation-millis	250	Int value. The amount of time to wait before assigning a container to the next level of locality. NODE -> RACK -> NON_LOCAL. Delay scheduling parameter. Expert level setting.	long	false	false	false
tez.am.container.reuse.non-local-fallback.enabled	false	Boolean value. Whether to reuse containers for non-local tasks. Active only if reuse is enabled. Turning this on can severely affect locality and can be bad for jobs with high data volume being read from the primary data sources.	boolean	false	false	false
tez.am.container.reuse.rack-fallback.enabled	true	Boolean value. Whether to reuse containers for rack local tasks. Active only if reuse is enabled.	boolean	false	false	false

tez.am.credentials-merge	null	Boolean value. If true then Tez will add the ApplicationMaster credentials to all task credentials.	boolean	false	false	false
tez.am.dag.cleanup.on.completion	false	Boolean value. Instructs AM to delete Dag directory upon completion	boolean	false	false	false
tez.am.dag.deletion.thread-count-limit	10	Int value. Upper limit on the number of threads used to delete DAG directories on nodes.	integer	false	false	false
tez.am.dag.scheduler.class	org.apache.tez.dag.app.dag.impl.DAGSchedulerNaturalOrder	String value. The class to be used for DAG Scheduling. Expert level setting.	string	false	false	false
tez.am.deletion.tracker.class	org.apache.tez.dag.app.launcher.DeletionTrackerImpl	String value that is a class name. Specify the class to use for Deletion tracking.	string	false	false	false
tez.am.disable.client-version-check	false	Boolean value. Disable version check between client and AM/DAG. Default false.	boolean	true	false	false
tez.am.inline.task.execution.enabled	false	Tez AM Inline Mode flag. Not valid till Tez-684 get checked-in	boolean	true	false	false
tez.am.inline.task.execution.max-tasks	1	Int value. The maximium number of tasks running in parallel within the app master process.	integer	false	false	false
tez.am.launch.cluster-default.cmd-opts	-server -Djava.net.preferIPv4Stack=true -Dhadoop.metrics.log.level=WARN	String value. Command line options which will be prepended to {@link #TEZ_AM_LAUNCH_CMD_OPTS} during the launch of the AppMaster process. This property will typically be configured to include default options meant to be used by all jobs in a cluster. If required, the values can be overridden per job.	string	false	false	false
tez.am.launch.cluster-default.env	null	String value. Env settings will be merged with {@link #TEZ_AM_LAUNCH_ENV} during the launch of the AppMaster process. This property will typically be configured to include default system env meant to be used by all jobs in a cluster. If required, the values can be appended to per job.	string	false	false	false
tez.am.launch.cmd-opts	-XX:+PrintGCDetails -verbose:gc -XX:+PrintGCTimeStamps -XX:+UseNUMA -XX:+UseParallelGC	String value. Command line options provided during the launch of the Tez AppMaster process. Its recommended to not set any Xmx or Xms in these launch opts so that Tez can determine them automatically.	string	false	false	false
tez.am.launch.env		String value. Env settings for the Tez AppMaster process. Should be specified as a comma-separated of key-value pairs where each pair is defined as KEY=VAL e.g. "LD_LIBRARY_PATH=.,USERNAME=foo" These take least precedence compared to other methods of setting env. These get added to the app master environment prior to launching it. This setting will prepend existing settings in the cluster default	string	false	false	false
tez.am.legacy.speculative.single.task.vertex.timeout	-1	Long value. Specifies the timeout after which tasks on a single task vertex must be speculated. A negative value means not to use timeout for speculation of single task vertices.	long	false	false	true
tez.am.legacy.speculative.slowtask.threshold	null	Float value. Specifies how many standard deviations away from the mean task execution time should be considered as an outlier/slow task.	float	false	false	true
tez.am.log.level	INFO	Root Logging level passed to the Tez app master. Simple configuration: Set the log level for all loggers. e.g. INFO This sets the log level to INFO for all loggers. Advanced configuration: Set the log level for all classes, along with a different level for some. e.g. DEBUG;org.apache.hadoop.ipc=INFO;org.apache.hadoop.security=INFO This sets the log level for all loggers to DEBUG, expect for the org.apache.hadoop.ipc and org.apache.hadoop.security, which are set to INFO Note: The global log level must always be the first parameter. DEBUG;org.apache.hadoop.ipc=INFO;org.apache.hadoop.security=INFO is valid org.apache.hadoop.ipc=INFO;org.apache.hadoop.security=INFO is not valid	string	false	false	false
tez.am.max.allowed.time-sec.for-read-error	300	int value. Represents the maximum time in seconds for which a consumer attempt can report a read error against its producer attempt, after which the producer attempt will be re-run to re-generate the output. There are other heuristics which determine the retry and mainly try to guard against a flurry of re-runs due to intermittent read errors (due to network issues). This configuration puts a time limit on those heuristics to ensure jobs dont hang indefinitely due to lack of closure in those heuristics Expert level setting.	integer	false	false	false
tez.am.max.app.attempts	2	Int value. Specifies the number of times the app master can be launched in order to recover from app master failure. Typically app master failures are non-recoverable. This parameter is for cases where the app master is not at fault but is lost due to system errors. Expert level setting.	integer	false	false	false
tez.am.maxtaskfailures.per.node	10	Int value. Specifies the number of task failures on a node before the node is considered faulty.	integer	false	false	false
tez.am.modify-acls	null	String value. AM modify ACLs. This allows the specified users/groups to run modify operations on the AM such as submitting DAGs, pre-warming the session, killing DAGs or shutting down the session. Comma separated list of users, followed by whitespace, followed by a comma separated list of groups	string	false	false	false
tez.am.node-blacklisting.enabled	true	Boolean value. Enabled blacklisting of nodes of nodes that are considered faulty. These nodes will not be used to execute tasks.	boolean	false	false	false
tez.am.node-blacklisting.ignore-threshold-node-percent	33	Int value. Specifies the percentage of nodes in the cluster that may be considered faulty. This limits the number of nodes that are blacklisted in an effort to minimize the effects of temporary surges in failures (e.g. due to network outages).	integer	false	false	false

tez.am.node-unhealthy-reschedule-tasks	false	Boolean value. Enable task rescheduling for node updates. When enabled the task scheduler will reschedule task attempts that are associated with an unhealthy node to avoid potential data transfer errors from downstream tasks.	boolean	false	false	false
tez.am.preemption.heartbeats-between-preemptions	3	Int value. The number of RM heartbeats to wait after preempting running tasks before preempting more running tasks. After preempting a task, we need to wait at least 1 heartbeat so that the RM can act on the released resources and assign new ones to us. Expert level setting.	integer	false	false	false
tez.am.preemption.max.wait-time-ms	60000	Int value. Time (in millisecs) that an unsatisfied request will wait before preempting other resources. In rare cases, the cluster says there are enough free resources but does not end up getting enough on a node to actually assign it to the job. This configuration tries to put a deadline on such wait to prevent indefinite job hangs.	integer	false	false	false
tez.am.preemption.percentage	10	Int value. Specifies the percentage of tasks eligible to be preempted that will actually be preempted in a given round of Tez internal preemption. This slows down preemption and gives more time for free resources to be allocated by the cluster (if any) and gives more time for preemptable tasks to finish. Valid values are 0-100. Higher values will preempt quickly at the cost of losing work. Setting to 0 turns off preemption. Expert level setting.	integer	false	false	false
tez.am.resource.cpu.vcores	1	Int value. The number of virtual cores to be used by the app master	integer	false	false	false
tez.am.resource.memory.mb	1024	Int value. The amount of memory in MB to be used by the AppMaster	integer	false	false	false
tez.am.am-rm.heartbeat.interval-ms.max	1000	Int value. The maximum heartbeat interval between the AM and RM in milliseconds Increasing this reduces the communication between the AM and the RM and can help in scaling up. Expert level setting.	integer	false	false	false
tez.am.session.min.held-containers	0	Int value. The minimum number of containers that will be held in session mode. Not active in non-session mode. Enables an idle session (not running any DAG) to hold on to a minimum number of containers to provide fast response times for the next DAG.	integer	false	false	false
tez.am.mode.session	false	Boolean value. Execution mode for the Tez application. True implies session mode. If the client code is written according to best practices then the same code can execute in either mode based on this configuration. Session mode is more aggressive in reserving execution resources and is typically used for interactive applications where multiple DAGs are submitted in quick succession by the same user. For long running applications, one-off executions, batch jobs etc non-session mode is recommended. If session mode is enabled then container reuse is recommended.	boolean	false	false	false
tez.am.shuffle.auxiliary-service.id	mapreduce_shuffle	String value. Specifies the name of the shuffle auxiliary service.	string	false	false	false
tez.am.speculation.enabled	false		boolean	false	false	true
tez.staging-dir	null	String value. Specifies a directory where Tez can create temporary job artifacts.	string	false	false	false
tez.am.staging.scratch-data.auto-delete	true	Boolean value. If true then Tez will try to automatically delete temporary job artifacts that it creates within the specified staging dir. Does not affect any user data.	boolean	false	false	false
tez.am.task.listener.thread-count	30	Int value. The number of threads used to listen to task heartbeat requests. Expert level setting.	integer	false	false	false
tez.am.task.max.failed.attempts	4	Int value. The maximum number of attempts that can fail for a particular task before the task is failed. This does not count killed attempts. Task failure results in DAG failure.	integer	false	false	false
tez.am.task.reschedule.higher.priority	true	Boolean value. Specifies whether a re-scheduled attempt of a task, caused by previous failures gets higher priority	boolean	false	false	false
tez.am.task.reschedule.relaxed.locality	true	Boolean value. Specifies whether a re-scheduled attempt of a task, caused by previous failure get relaxed locality	boolean	false	false	false
tez.am.tez-ui.history-url.template	__HISTORY_URL_BASE__/#/tez-app/__APPLICATION_ID__	String value Tez UI URL template for the application. Expert level setting. The AM will redirect the user to the Tez UI via this url. Template supports the following parameters to be replaced with the actual runtime information: __APPLICATION_ID__ : Replaces this with application ID __HISTORY_URL_BASE__: replaces this with TEZ_HISTORY_URL_BASE For example, "http://uihost:9001/#/tez-app/__APPLICATION_ID__/ will be replaced to http://uihost:9001/#/tez-app/application_1421880306565_0001/	string	false	false	false
tez.am.vertex.max-task-concurrency	-1	Int value. The maximum number of attempts that can run concurrently for a given vertex. Setting <=0 implies no limit	integer	false	false	false
tez.am.view-acls	null	String value. AM view ACLs. This allows the specified users/groups to view the status of the AM and all DAGs that run within this AM. Comma separated list of users, followed by whitespace, followed by a comma separated list of groups	string	false	false	false
tez.am.tez-ui.webservice.enable	true	String value Allow disabling of the Tez AM webservice. If set to false the Tez-UI wont show progress updates for running application.	boolean	false	false	false
tez.application.tags	null	String value. Tags for the job that will be passed to YARN at submission time. Queries to	string	false	false	false

		YARN for applications can filter on these tags.				
tez.aux.uris	null	Auxiliary resources to be localized for the Tez AM and all its containers. Value is comma-separated list of fully-resolved directories or file paths. All resources are made available into the working directory of the AM and/or containers i.e. $CWD. If directories are specified, they are not traversed recursively. Only files directly under the specified directory are localized. All duplicate resources are ignored.	string	false	false	false
tez.cancel.delegation.tokens.on.completion	true		boolean	true	false	false
tez.classpath.add-hadoop-conf	false	Boolean value. If this value is true then tez explicitly adds hadoop conf directory into classpath for AM and task containers. Default is false.	boolean	true	false	true
tez.client.asynchronous-stop	true	Boolean value. Backwards compatibility setting. Changes TezClient stop to be a synchronous call waiting until AM is in a final state before returning to the user. Expert level setting.	boolean	false	false	false
tez.client.diagnostics.wait.timeout-ms	3000	Long value Time to wait (in milliseconds) for yarn app's diagnotics is available Workaround for YARN-2560	long	true	false	false
tez.client.timeout-ms	30000	Long value. Time interval, in milliseconds, for client to wait during client-requested AM shutdown before issuing a hard kill to the RM for this application. Expert level setting.	long	false	false	false
tez.java.opts.checker.class	null	String value. Ability to provide a different implementation to check/verify java opts defined for vertices/tasks. Class has to be an instance of JavaOptsChecker	string	true	false	false
tez.java.opts.checker.enabled	true	Boolean value. Default true. Ability to disable the Java Opts Checker	boolean	true	false	false
tez.container.max.java.heap.fraction	0.8	Double value. Tez automatically determines the Xmx for the JVMs used to run Tez tasks and app masters. This feature is enabled if the user has not specified Xmx or Xms values in the launch command opts. Doing automatic Xmx calculation is preferred because Tez can determine the best value based on actual allocation of memory to tasks the cluster. The value if used as a fraction that is applied to the memory allocated Factor to size Xmx based on container memory size. Value should be greater than 0 and less than 1. Set this value to -1 to allow Tez to use different default max heap fraction for different container memory size. Current policy is to use 0.7 for container smaller than 4GB and use 0.8 for larger container.	float	false	false	false
tez.counters.counter-name.max-length	64	Int value. Configuration to limit the length of counter names. This can be used to limit the amount of memory being used in the app master to store the counters. Expert level setting.	integer	false	false	true
tez.counters.group-name.max-length	256	Int value. Configuration to limit the counter group names per app master. This can be used to limit the amount of memory being used in the app master to store the counters. Expert level setting.	integer	false	false	true
tez.counters.max	1200	Int value. Configuration to limit the counters per dag (AppMaster and Task). This can be used to limit the amount of memory being used in the app master to store the counters. Expert level setting.	integer	false	false	true
tez.counters.max.groups	500	Int value. Configuration to limit the number of counter groups for a DAG. This can be used to limit the amount of memory being used in the app master to store the counters. Expert level setting.	integer	false	false	true
tez.credentials.path	null	String value that is a file path. Path to a credentials file (with serialized credentials) located on the local file system.	string	false	false	false
tez.dag.status.pollinterval-ms	500	Long value Status Poll interval in Milliseconds used when getting DAG status with timeout.	long	false	false	false
tez.generate.debug.artifacts	false		boolean	false	false	true
tez.history.logging.log.level	null	Enum value. Config to limit the type of events published to the history logging service. The valid log levels are defined in the enum {@link HistoryLogLevel}. The default value is defined in {@link HistoryLogLevel#DEFAULT}.	string	false	false	false
tez.history.logging.service.class	org.apache.tez.dag.history.logging.impl.SimpleHistoryLoggingService	String value that is a class name. Specify the class to use for logging history data. To disable, set this to "org.apache.tez.dag.history.logging.impl.DevNullHistoryLoggingService"	string	false	false	false
tez.history.logging.taskattempt-filters	null	List of comma separated enum values. Specifies the list of task attempt termination causes, which have to be suppressed from being logged to ATS. The valid filters are defined in the enum TaskAttemptTerminationCause. The filters are applied only if tez.history.logging.log.level is set to TASK_ATTEMPT.	string	false	false	false
tez.history.logging.timeline-cache-plugin.old-num-dags-per-group	null	Comma separated list of Integers. These are the values that were set for the config value for {@value #TEZ_HISTORY_LOGGING_TIMELINE_NUM_DAGS_PER_GROUP}. The older values are required so that the groupIds generated previously will continue to be generated by the plugin. If an older value is not present then the UI may not show information for DAGs which were created with a different grouping value. Note: Do not add too many values here as it will affect the performance of Yarn Timeline Server/Tez UI due to the need to scan for more log files.	string	true	false	true
tez.history.logging.timeline.num-dags-per-group	1	Integer value. Number of DAGs to be grouped together. This is used by the history logging	integer	true	false	true

		service to generate groupIds such that numDagsPerGroup will have same groupId in a given session. If the value is set to 1 then we disable grouping. This config is used to control the number of DAGs written into one log file, and hence controls number of files created in the Filesystem used by YARN Timeline.				
tez.tez-ui.history-url.base	null	String value Tez-UI Url base. This gets replaced in the TEZ_AM_TEZ_UI_HISTORY_URL_TEMPLATE ex http://ui-host:9001 or if its hosted with a prefix http://ui-host:9001/~user if the ui is hosted on the default port (80 for http and 443 for https), the port should not be specified.	string	false	false	false
tez.ignore.lib.uris	null	Boolean value. Allows to ignore 'tez.lib.uris'. Useful during development as well as raw Tez application where classpath is propagated with application via {@link LocalResource}s. This is mainly useful for developer/debugger scenarios.	boolean	false	false	true
tez.ipc.payload.reserved.bytes	5242880	Int value. SubmitDAGPlanRequest cannot be larger than Max IPC message size minus this number; otherwise, it will be serialized to HDFS and we transfer the path to server. Server will deserialize the request from HDFS.	int	true	false	false
tez.tez.jvm.system-properties-to-log	null	String value. Determines what JVM properties will be logged for debugging purposes in the AM and Task runtime logs.	string	false	false	false
tez.lib.uris	null	String value to a file path. The location of the Tez libraries which will be localized for DAGs. This follows the following semantics 1. To use .tar.gz or .tgz files (generated by the tez or hadoop builds), the full path to this file (including filename) should be specified. The internal structure of the uncompressed tgz will be defined by 'tez.lib.uris.classpath' 2. If a single file is specified without the above mentioned extensions - it will be treated as a regular file. This means it will not be uncompressed during runtime. 3. If multiple entries exist ◦ Regular Files: will be treated as regular files (not uncompressed during runtime) ◦ Archive Files: will be treated as archives and will be uncompressed during runtime ◦ Directories: all files under the directory (non-recursive) will be made available (but not uncompressed during runtime).	string	false	false	false
tez.lib.uris.classpath	null	Specify additional user classpath information to be used for Tez AM and all containers. This will be appended to the classpath after PWD 'tez.lib.uris.classpath' defines the relative classpath into the archives that are set in 'tez.lib.uris'	string	false	false	false
tez.local.mode	false	Boolean value. Enable local mode execution in Tez. Enables tasks to run in the same process as the app master. Primarily used for debugging.	boolean	false	false	false
tez.queue.name	null	String value. The queue name for all jobs being submitted from a given client.	string	false	false	false
tez.session.am.dag.submit.timeout.secs	300	Int value. Time (in seconds) for which the Tez AM should wait for a DAG to be submitted before shutting down. Only relevant in session mode. Any negative value will disable this check and allow the AM to hang around forever in idle mode.	integer	false	false	false
tez.session.client.timeout.secs	120	Int value. Time (in seconds) to wait for AM to come up when trying to submit a DAG from the client. Only relevant in session mode. If the cluster is busy and cannot launch the AM then this timeout may be hit. In those case, using non-session mode is recommended if applicable. Otherwise increase the timeout (set to -1 for infinity. Not recommended)	integer	false	false	false
tez.simple.history.logging.dir	null	String value. The directory into which history data will be written. This defaults to the container logging directory. This is relevant only when SimpleHistoryLoggingService is being used for {@link TezConfiguration#TEZ_HISTORY_LOGGING_SERVICE_CLASS}	string	false	false	false
tez.simple.history.max.errors	10	Int value. Maximum errors allowed while logging history data. After crossing this limit history logging gets disabled. The job continues to run after this.	integer	false	false	false
tez.task.am.heartbeat.counter.interval-ms.max	4000	Int value. Interval, in milliseconds, after which counters are sent to AM in heartbeat from tasks. This reduces the amount of network traffice between AM and tasks to send high-volume counters. Improves AM scalability. Expert level setting.	integer	false	false	false
tez.task.am.heartbeat.interval-ms.max	100	Int value. The maximum heartbeat interval, in milliseconds, between the app master and tasks. Increasing this can help improve app master scalability for a large number of concurrent tasks. Expert level setting.	integer	false	false	false
tez.task.generate.counters.per.io	false	Whether to generate counters per IO or not. Enabling this will rename CounterGroups / CounterNames to making them unique per Vertex + Src|Destination	boolean	true	false	true
tez.task.get-task.sleep.interval-ms.max	200	Int value. The maximum amount of time, in milliseconds, to wait before a task asks an AM for another task. Increasing this can help improve app master scalability for a large number of concurrent tasks. Expert level setting.	integer	false	false	false

tez.task.initialize-processor-first	false	Boolean value. Backwards compatibility setting for initializing IO processor before inputs and outputs. Expert level setting.	boolean	false	false	false
tez.task.initialize-processor-io-serially	false	Boolean value. Backwards compatibility setting for initializing inputs and outputs serially instead of the parallel default. Expert level setting.	boolean	false	false	false
tez.task.launch.cluster-default.cmd-opts	-server -Djava.net.preferIPv4Stack=true -Dhadoop.metrics.log.level=WARN	String value. Command line options which will be prepended to {@link #TEZ_TASK_LAUNCH_CMD_OPTS} during the launch of Tez tasks. This property will typically be configured to include default options meant to be used by all jobs in a cluster. If required, the values can be overridden per job.	string	false	false	false
tez.task.launch.cluster-default.env	null	String value. Env settings will be merged with {@link #TEZ_TASK_LAUNCH_ENV} during the launch of the task process. This property will typically be configured to include default system env meant to be used by all jobs in a cluster. If required, the values can be appended to per job.	string	false	false	false
tez.task.launch.cmd-opts	-XX:+PrintGCDetails -verbose:gc -XX:+PrintGCTimeStamps -XX:+UseNUMA -XX:+UseParallelGC	String value. Command line options provided during the launch of Tez Task processes. Its recommended to not set any Xmx or Xms in these launch opts so that Tez can determine them automatically.	string	false	false	false
tez.task.launch.env		String value. Env settings for the Tez Task processes. Should be specified as a comma-separated of key-value pairs where each pair is defined as KEY=VAL e.g. "LD_LIBRARY_PATH=.,USERNAME=foo" These take least precedence compared to other methods of setting env These get added to the task environment prior to launching it. This setting will prepend existing settings in the cluster default	string	false	false	false
tez.task.log.level	INFO	Root Logging level passed to the Tez tasks. Simple configuration: Set the log level for all loggers. e.g. INFO This sets the log level to INFO for all loggers. Advanced configuration: Set the log level for all classes, along with a different level for some. e.g. DEBUG;org.apache.hadoop.ipc=INFO;org.apache.hadoop.security=INFO This sets the log level for all loggers to DEBUG, expect for the org.apache.hadoop.ipc and org.apache.hadoop.security, which are set to INFO Note: The global log level must always be the first parameter. DEBUG;org.apache.hadoop.ipc=INFO;org.apache.hadoop.security=INFO is valid org.apache.hadoop.ipc=INFO;org.apache.hadoop.security=INFO is not valid	string	false	false	false
tez.task.max-events-per-heartbeat	500	Int value. Maximum number of of events to fetch from the AM by the tasks in a single heartbeat. Expert level setting. Expert level setting.	integer	false	false	false
tez.task.max-event-backlog	10000	Int value. Maximum number of pending task events before a task will stop asking for more events in the task heartbeat. Expert level setting.	integer	false	false	false
tez.task.progress.stuck.interval-ms	-1	Long value. Interval, in milliseconds, within which any of the tasks Input/Processor/Output components need to make successive progress notifications. If the progress is not notified for this interval then the task will be considered hung and terminated. The value for this config should be larger than {@link TezConfiguration#TASK_HEARTBEAT_TIMEOUT_MS} and larger than 2 times the value of {@link TezConfiguration#TEZ_TASK_AM_HEARTBEAT_INTERVAL_MS}. A config value <=0 disables this.	string	false	false	false
tez.task.resource.calculator.process-tree.class	null		string	true	false	true
tez.task.resource.cpu.vcores	1	Int value. The number of virtual cores to be used by tasks.	integer	false	false	false
tez.task.resource.memory.mb	1024	Int value. The amount of memory in MB to be used by tasks. This applies to all tasks across all vertices. Setting it to the same value for all tasks is helpful for container reuse and thus good for performance typically.	integer	false	false	false
tez.task.scale.memory.additional-reservation.fraction.max	null		float	true	false	true
tez.task.scale.memory.additional-reservation.fraction.per-io	null	Fraction of available memory to reserve per input/output. This amount is removed from the total available pool before allocation and is for factoring in overheads.	float	true	false	true
tez.task.scale.memory.allocator.class	org.apache.tez.runtime.library.resources.WeightedScalingMemoryDistributor	The allocator to use for initial memory allocation	string	true	false	true
tez.task.scale.memory.enabled	true	Whether to scale down memory requested by each component if the total exceeds the available JVM memory	boolean	true	false	true
tez.task.scale.memory.reserve-fraction	0.3	The fraction of the JVM memory which will not be considered for allocation. No defaults, since there are pre-existing defaults based on different scenarios.	double	true	false	true
tez.task.scale.memory.ratios	null		string	true	false	true
tez.task-specific.launch.cmd-opts	null	Additional launch command options to be added for specific tasks. __VERTEX_NAME__ and __TASK_INDEX__ can be specified, which would be replaced at runtime by vertex name and task index. e.g tez.task-specific.launch.cmd-opts= "-agentpath:libpagent.so,dir=/tmp/__VERTEX_NAME__/__TASK_INDEX__"	string	false	false	true

tez.task-specific.launch.cmd-opts.list	null	Set of tasks for which specific launch command options need to be added. Format: "vertexName[csv of task ids];vertexName[csv of task ids].." Valid e.g: v[0,1,2] - Additional launch-cmd options for tasks 0,1,2 of vertex v v[1,2,3];v2[5,6,7] - Additional launch-cmd options specified for tasks of vertices v and v2. v[1:5,20,30];v2[2:5,60,7] - Additional launch-cmd options for 1,2,3,4,5,20,30 of vertex v; 2, 3,4,5,60,7 of vertex v2 Partial ranges like :5, 1: are not supported. v[] - Additional launch-cmd options for all tasks in vertex v	string	false	false	true
tez.task-specific.log.level	null	Task specific log level. Simple configuration: Set the log level for all loggers. e.g. INFO This sets the log level to INFO for all loggers. Advanced configuration: Set the log level for all classes, along with a different level for some. e.g. DEBUG;org.apache.hadoop.ipc=INFO;org.apache.hadoop.security=INFO This sets the log level for all loggers to DEBUG, expect for the org.apache.hadoop.ipc and org.apache.hadoop.security, which are set to INFO Note: The global log level must always be the first parameter. DEBUG;org.apache.hadoop.ipc=INFO;org.apache.hadoop.security=INFO is valid org.apache.hadoop.ipc=INFO;org.apache.hadoop.security=INFO is not valid	string	false	false	true
tez.test.minicluster.app.wait.on.shutdown.secs	30	Long value. Time to wait (in seconds) for apps to complete on MiniTezCluster shutdown.	long	true	false	false
tez.user.classpath.first	true	Boolean value. Specify whether the user classpath takes precedence over the Tez framework classpath.	boolean	false	false	false
tez.use.cluster.hadoop-libs	false	Boolean value. Specify whether hadoop libraries required to run Tez should be the ones deployed on the cluster. This is disabled by default - with the expectation being that tez.lib.uris has a complete tez-deployment which contains the hadoop libraries.	boolean	false	false	false
tez.yarn.ats.acl.domains.auto-create	true		boolean	false	false	false
tez.yarn.ats.event.flush.timeout.millis	-1	Int value. Time, in milliseconds, to wait while flushing YARN ATS data during shutdown. Expert level setting.	long	false	false	false
tez.yarn.ats.max.events.per.batch	5	Int value. Max no. of events to send in a single batch to ATS. Expert level setting.	integer	false	false	false
tez.yarn.ats.max.polling.time.per.event.millis	10	Int value. Time, in milliseconds, to wait for an event before sending a batch to ATS. Expert level setting.	integer	false	false	false