

**Voldemort Admin Tool**

The Voldemort admin tool allows you to run administrative commands such as streaming and migrating partitions , changing metadata e.g., adding new machines to the cluster or adding new stores.

**COMMANDS SUPPORTED**

**CHANGE METADATA**

1) *Get all metadata from all nodes*

**./bin/voldemort-admin-tool.sh --get-metadata --url [url]**

2) *Get metadata from all nodes*

**./bin/voldemort-admin-tool.sh --get-metadata [cluster.xml, stores.xml, server.state, node.id, rebalancing.steal.info.key] --url [url]**

3) *Get metadata from a particular node*

**./bin/voldemort-admin-tool.sh --get-metadata [cluster.xml, stores.xml, server.state, node.id, rebalancing.steal.info.key] --url [url] --node [node-id]**

4) *Get metadata from a particular node and store to a directory*

**./bin/voldemort-admin-tool.sh --get-metadata [cluster.xml, stores.xml, server.state, node.id, rebalancing.steal.info.key] --url [url] --node [node-id] --outdir [directory]**

5) *Set metadata on all nodes*

**./bin/voldemort-admin-tool.sh --set-metadata [cluster.xml, server.state, stores.xml, rebalancing.steal.info.key] --set-metadata-value [metadata-value] --url [url]**

6) *Set metadata for a particular node*

**./bin/voldemort-admin-tool.sh --set-metadata [cluster.xml, server.state, stores.xml, rebalancing.steal.info.key] --set-metadata-value [metadata-value] --url [url] --node [node-id]**

7) *Check if metadata is same on all nodes*

**./bin/voldemort-admin-tool.sh --check-metadata [cluster.xml, server.state, stores.xml] --url [url]**

8) *Clear rebalancing metadata [server.state, rebalancing.steal.info.key] on all node*

**./bin/voldemort-admin-tool.sh --clear-rebalancing-metadata --url [url]**

9) *Clear rebalancing metadata [server.state, rebalancing.steal.info.key] on a particular node*

**./bin/voldemort-admin-tool.sh --clear-rebalancing-metadata --url [url] --node [node-id]**

**ADD / DELETE STORES**

1) *Add store(s) on all nodes*

**./bin/voldemort-admin-tool.sh --add-stores [xml file with store(s) to add] --url [url]**

2) *Add store(s) on a single node*

**./bin/voldemort-admin-tool.sh --add-stores [xml file with store(s) to add] --url [url] --node [node-id]**

3) *Delete store on all nodes*

**./bin/voldemort-admin-tool.sh --delete-store [store-name] --url [url]**

4) *Delete store on a single node*

**./bin/voldemort-admin-tool.sh --delete-store [store-name] --url [url] --node [node-id]**

5) *Delete the contents of the store on all nodes*

**./bin/voldemort-admin-tool.sh --truncate [store-name] --url [url]**

6) *Delete the contents of the store on a single node*

**./bin/voldemort-admin-tool.sh --truncate [store-name] --url [url] --node [node-id]**

7) *Delete the contents of some partitions on a single node*

**./bin/voldemort-admin-tool.sh --delete-partitions [comma-separated list of partitions] --url [url] --node [node-id]**

8) *Delete the contents of some partitions ( of some stores ) on a single node*

**./bin/voldemort-admin-tool.sh --delete-partitions [comma-separated list of partitions] --url [url] --node [node-id] --stores [comma-separated list of store names]**

**STREAM DATA**

1) *Fetch keys from a set of partitions [ all stores ] on a node ( binary dump )*

**./bin/voldemort-admin-tool.sh --fetch-keys [comma-separated list of partitions with no space] --url [url] --node [node-id]**

2) *Fetch keys from a set of partitions [ all stores ] on a node ( ascii enabled )*

**./bin/voldemort-admin-tool.sh --fetch-keys [comma-separated list of partitions with no space] --url [url] --node [node-id] --ascii**

3) *Fetch entries from a set of partitions [ all stores ] on a node ( binary dump )*

**./bin/voldemort-admin-tool.sh --fetch-entries [comma-separated list of partitions with no space] --url [url] --node [node-id]**

4) *Fetch entries from a set of partitions [ all stores ] on a node ( ascii enabled )*

**./bin/voldemort-admin-tool.sh --fetch-entries [comma-separated list of partitions with no space] --url [url] --node [node-id] --ascii**

5) *Fetch entries from a set of partitions [ all stores ] on a node ( ascii enabled ) and output to a folder*

**./bin/voldemort-admin-tool.sh --fetch-entries [comma-separated list of partitions with no space] --url [url] --node [node-id] --ascii --outdir [directory]**

6) *Fetch entries from a set of partitions and some stores on a node ( ascii enabled )*

**./bin/voldemort-admin-tool.sh --fetch-entries [comma-separated list of partitions with no space] --url [url] --node [node-id] --ascii --stores [comma-separated list of store names]**

7) *Fetch all keys on a particular node*

**./bin/voldemort-admin-tool.sh --fetch-keys --url [url] --node [node-id]**

8) *Fetch all entries on a particular node*

**./bin/voldemort-admin-tool.sh --fetch-entries --url [url] --node [node-id]**

9) *Update entries for a set of stores using the output from a binary dump fetch entries*

**./bin/voldemort-admin-tool.sh --update-entries [folder path from output of --fetch-entries --outdir] --url [url] --node [node-id] --stores [comma-separated list of store names]**

**READ-ONLY OPERATIONS**

1) *Retrieve metadata information of read-only data for a particular node and all stores*

**./bin/voldemort-admin-tool.sh --ro-metadata [current | max | storage-format] --url [url] --node [node-id]**

2) *Retrieve metadata information of read-only data for all nodes and a set of store*

**./bin/voldemort-admin-tool.sh --ro-metadata [current | max | storage-format] --url [url] --stores [comma-separated list of store names]**

**ASYNC JOBS**

1) *Get a list of async jobs on all nodes*

**./bin/voldemort-admin-tool.sh --async get --url [url]**

2) *Get a list of async jobs on a particular node*

**./bin/voldemort-admin-tool.sh --async get --url [url] --node [node-id]**

3) *Stop a list of async jobs on a particular node*

**./bin/voldemort-admin-tool.sh --async stop --async-id [comma-separated list of async job id] --url [url] --node [node-id]**

**OTHERS**

1) *Restore a particular node completely from its replicas*

**./bin/voldemort-admin-tool.sh --restore --url [url] --node [node-id]**

2) *Restore a particular node completely from its replicas ( with increased parallelism – 10 )*

**./bin/voldemort-admin-tool.sh --restore 10 --url [url] --node [node-id]**

3) *Generates the key distribution on a per node basis [ both store wise and overall ]*

**./bin/voldemort-admin-tool.sh --key-distribution --url [url]**

**Backup and restore commands:**

1) Backup bdb data on one single node natively (this op needs confirmation)

**./bin/vadmin.sh native-backup -d <backup-dir> -n <node-id> -s <store-name> -u <url> [--timeout <time-minute>] [--incremental] [--verify] [--confirm]**

2) Restore data on one single node from its peer replication (this op needs confirmation)

**./bin/vadmin.sh restore-from-replica -n <node-id> -u <url> -z <zone-id> [--parallel <num>] [--confirm]**

Cleanup commands:

1) Remove orphaned data on some nodes or all nodes, after rebalancing is done (this op needs confirmation)

**./bin/vadmin.sh cleanup orphaned-data -u <url> [-n <node-id-list> | --all-nodes] [--confirm]**

2) Prune data of stores resulting from versioned puts during rebalancing, on some nodes or all nodes (this op needs confirmation)

**./bin/vadmin.sh cleanup vector-clocks -s <store-name-list> -url <url> [-n <node-id-list> | --all-nodes] [–confirm]**

3) Purge slops of stores in a zone, on some nodes or all nodes (this op needs confirmation)

**./bin/vadmin.sh cleanup slops -s <store-name-list> -u <url> -z <zone-id> [-n <node-id-list> | --all-nodes] [--confirm]**

1. Get / set metadata
   1. Get metadata from all nodes

**./bin/voldemort-admin-tool.sh --get-metadata [metadata-key] --url [url]**

* 1. Get metadata from a particular node

**./bin/voldemort-admin-tool.sh --get-metadata [metadata-key] --url [url] --node [node-id]**

* 1. Set metadata on all nodes [ metadata-value is path to xml files for cluster.xml | stores.xml ]

**./bin/voldemort-admin-tool.sh --set-metadata [metadata-key] --set-metadata-value [metadata-value] --url [url]**

* 1. Set metadata for a particular node

**./bin/voldemort-admin-tool.sh --set-metadata [metadata-key] --set-metadata-value [metadata-value] --url [url] --node [node-id]**

* 1. Check if metadata is same on all nodes

**./bin/voldemort-admin-tool.sh --check-metadata [metadata-key] --url [url]**

1. Add / delete stores
   1. Add store(s) on all nodes

**./bin/voldemort-admin-tool.sh --add-stores [xml file with store(s) to add] --url [url]**

* 1. Add store(s) on single node

**./bin/voldemort-admin-tool.sh --add-stores [xml file with store(s) to add] --url [url] --node [node-id]**

* 1. Delete store on all nodes

**./bin/voldemort-admin-tool.sh --delete-store [store-name] --url [url]**

* 1. Delete the contents of the store on all nodes

**./bin/voldemort-admin-tool.sh --truncate [store-name] --url [url]**

* 1. Delete the contents of the store on a single node

**./bin/voldemort-admin-tool.sh --truncate [store-name] --url [url] --node [node-id]**

* 1. Delete the contents of some partitions on a single node

**./bin/voldemort-admin-tool.sh --delete-partitions [comma-separated list of partitions] --url [url] --node [node-id]**

* 1. Delete the contents of some partitions ( of some stores ) on a single node

**./bin/voldemort-admin-tool.sh --delete-partitions [comma-separated list of partitions] --url [url] --node [node-id] --stores [comma-separated list of store names]**

1. Stream data
   1. Fetch keys from a set of partitions [ all stores ] on a node ( binary dump )

**./bin/voldemort-admin-tool.sh --fetch-keys [comma-separated list of partitions with no space] --url [url] --node [node-id]**

* 1. Fetch keys from a set of partitions [ all stores ] on a node ( ascii enabled )

**./bin/voldemort-admin-tool.sh --fetch-keys [comma-separated list of partitions with no space] --url [url] --node [node-id] --ascii**

* 1. Fetch entries from a set of partitions [ all stores ] on a node ( binary dump )

**./bin/voldemort-admin-tool.sh --fetch-entries [comma-separated list of partitions with no space] --url [url] --node [node-id]**

* 1. Fetch entries from a set of partitions [ all stores ] on a node ( ascii enabled )

**./bin/voldemort-admin-tool.sh --fetch-entries [comma-separated list of partitions with no space] --url [url] --node [node-id] --ascii**

* 1. Fetch entries from a set of partitions [ all stores ] on a node ( ascii enabled ) and output to a folder

**./bin/voldemort-admin-tool.sh --fetch-entries [comma-separated list of partitions with no space] --url [url] --node [node-id] --ascii --outdir [directory]**

* 1. Fetch entries from a set of partitions and some stores on a node ( ascii enabled )

**./bin/voldemort-admin-tool.sh --fetch-entries [comma-separated list of partitions with no space] --url [url] --node [node-id] --ascii --stores [comma-separated list of store names]**

* 1. Update entries for a set of stores using the output from a binary dump fetch entries

**./bin/voldemort-admin-tool.sh --update-entries [folder path from output of --fetch-entries --outdir] --url [url] --node [node-id] --stores [comma-separated list of store names]**

Read-only operations

* 1. Retrieve metadata information of read-only data for a particular node and all stores

**./bin/voldemort-admin-tool.sh --ro-metadata [current | max | storage-format] --url [url] --node [node-id]**

* 1. Retrieve metadata information of read-only data for all nodes and a set of store

**./bin/voldemort-admin-tool.sh --ro-metadata [current | max | storage-format] --url [url] --stores [comma-separated list of store names]**

1. Others
   1. Restore a particular node completely from its replicas

**./bin/voldemort-admin-tool.sh --restore --url [url] --node [node-id]**

* 1. Restore a particular node completely from its replicas ( with increased parallelism - 10 )

**./bin/voldemort-admin-tool.sh --restore 10 --url [url] --node [node-id]**

* 1. Generates the key distribution on a per node basis [ both store wise and overall ]

**./bin/voldemort-admin-tool.sh --key-distribution --url [url] --node [node-id] --ascii**