

hashdb Quick Reference

<http://github.com/simsong/hashdb/wiki>

General Usage

hashdb <command> <options> <args> Run hashdb command, -q for quiet mode

New Database

create [-p <hash block size>] [-m <maximum duplicates>] [-a <byte alignment>] [-t <hash truncation>] [<bloom settings>] <hashdb.hdb> Create a new hash database

Import/Export

import [-r <repository name>] <hashdb.hdb> <dfxml.xml> Import from DFXML file into hash database
import_tab [-r <repository name>] [-s <sector size>] <hashdb.hdb> <dfxml.xml> Import from tab file into hash database
export <hashdb.hdb> <dfxml.xml> Export hash database to DFXML file

Database Manipulation

add <A.hdb> <B.hdb> $A + B \rightarrow B$ add *A* into *B*
add_multiple <A.hdb> <B.hdb> <C.hdb> $A + B \rightarrow C$ add *A* and *B* into *C*
add_repository <A.hdb> <B.hdb> <repository name> $A_r + B \rightarrow B$ add when repository name matches
intersect <A.hdb> <B.hdb> <C.hdb> $A \cap B \rightarrow C$ add when hash and source are common
intersect_hash <A.hdb> <B.hdb> <C.hdb> $A \cap B \rightarrow C$ add when hashes are common
subtract <A.hdb> <B.hdb> <C.hdb> $A - B \rightarrow C$ add when hash and source not common
subtract_hash <A.hdb> <B.hdb> <C.hdb> $A - B \rightarrow C$ add when hashes are not common
subtract_repository <A.hdb> <B.hdb> <repository name> $A_{\bar{r}} + B \rightarrow B$ add unless repository name matches
deduplicate <A.hdb> <B.hdb> $A_d \rightarrow B$ add only hashes in *A* that are distinct

Scan Services

scan <hashdb.hdb> <dfxml.xml> Scan DFXML file for matching hashes
scan_hash <hashdb.hdb> <hash value> Scan for hash match
scan_expanded [-m <number>] <hashdb.hdb> <dfxml.xml> Scan DFXML file for matches showing all sources
scan_expanded_hash [-m <number>] <hashdb.hdb> <hash value> Scan for hash match showing all sources

Statistics

size <hashdb.hdb> Print sizes of internal database tables
sources <hashdb.hdb> Print source metadata
histogram <hashdb.hdb> Print hash distribution
duplicates <hashdb.hdb> <number> Print hashes sourced the given number of times
hash_table <hashdb.hdb> <source_id> Print hashes associated with the source index
expand_identified_blocks [-m <number>] <hashdb.hdb> <identified_blocks.txt> Expand to include source information for each source
explain_identified_blocks [-m <number>] <hashdb.hdb> <identified_blocks.txt> Print information about less frequently observed hashes

Tuning

rebuild_bloom [<bloom settings>] <hashdb.hdb> Rebuild Bloom filter

Performance Analysis

add_random [-r <repository name>] <hashdb.hdb> <count> Add random hashes, log performance in log.xml
scan_random <hashdb.hdb> <count> Scan random hashes, log performance in log.xml

bulk_extractor Scanner

bulk_extractor -E hashdb -S hashdb_mode=import -o outdir1 my_media_image Import image
bulk_extractor -E hashdb -S hashdb_mode=import -o outdir1 -R my_import_dir Import directory
bulk_extractor -E hashdb -S hashdb_mode=scan -S hashdb_scan_path_or_socket=outdir1/hashdb.hdb -o outdir2 my_image2 Scan image