

# hashdb Quick Reference

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

## General Usage

hashdb <command> <options> <parameters>

Run hashdb command, -q for quiet mode, -f <flags> to control B-Tree flags

## New Database

create [-p <hash block size>] [-m <maximum duplicates>] [<bloom settings>] <hashdb.hdb>

Create a new hash database

## Import/Export

import [-r <repository name>] <hashdb.hdb>  
<dfxml.xml>  
export <hashdb.hdb> <dfxml.xml>

Import from DFXML file into hash database

Export hash database to DFXML file

## Database Manipulation

add <A.hdb> <B.hdb>  
add\_multiple <A.hdb> <B.hdb> <C.hdb>  
add\_repository <A.hdb> <B.hdb> <repository name>  
  
intersect <A.hdb> <B.hdb> <C.hdb>  
intersect\_hash <A.hdb> <B.hdb> <C.hdb>  
subtract <A.hdb> <B.hdb> <C.hdb>  
subtract\_hash <A.hdb> <B.hdb> <C.hdb>  
deduplicate <A.hdb> <B.hdb>

$A + B \rightarrow B$  Add A into B  
 $A + B \rightarrow C$  add A and B into C  
 $A + B \rightarrow B$  Add A into B but only when the repository name matches  
 $A \cap B \rightarrow C$  add intersection of A and B into C  
 $A \cap B \rightarrow C$  intersect into C when hashes match  
 $A - B \rightarrow C$  add A but not B into C  
 $A - B \rightarrow C$  add A but not hashes in B into C  
Copy  $A \rightarrow B$  except for hashes with duplicates

## Scan Services

scan <path or socket> <dfxml.xml>  
scan\_hash <path or socket> <hash value>  
scan\_expanded <hashdb.hdb> <dfxml.xml>  
scan\_expanded\_hash <hashdb.hdb> <hash value>  
server <hashdb.hdb> <port number>

Scan DFXML file for matching hashes  
Scan for hash match  
Scan DFXML file for matches showing all sources  
Scan for hash match showing all sources  
Start scan service at port

## Statistics

size <hashdb.hdb>  
sources <hashdb.hdb>  
histogram <hashdb.hdb>  
duplicates <hashdb.hdb> <number>  
hash\_table <hashdb.hdb> <repository name> <filename>  
expand\_identified\_blocks <hashdb.hdb> <identified\_blocks.txt>  
explain\_identified\_blocks [-m <number>] <hashdb.hdb> <identified\_blocks.txt>

Print sizes of internal database tables  
Print source metadata  
Print hash distribution  
Print hashes sourced the given number of times  
Print the hashes associated with this source  
  
Expand to include source information for each source  
Print information about less frequently observed hashes

## Tuning

rebuild\_bloom [<bloom settings>] <hashdb.hdb>  
upgrade <hashdb.hdb>

Rebuild Bloom filter  
Make database from v1.0.0 compatible with v1.1.0

## Performance Analysis

add\_random [-r <repository name>] <hashdb.hdb> <count>  
scan\_random <hashdb.hdb> <copy.hdb>

Add random hashes, log performance in log.xml  
Scan random hashes, log performance in log.xml

## bulk\_extractor Scanner

bulk\_extractor -E hashdb -S hashdb\_mode=import -o outdir1 -R my\_import\_dir  
bulk\_extractor -E hashdb -S hashdb\_mode=scan -S hashdb\_scan\_path\_or\_socket=  
outdir1/hashdb.hdb -o outdir2 my\_image2

Import directory  
Scan image