

xtrabackup help信息

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[root@BkpV5Mysql01 ~]# xtrabackup --help
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xtrabackup version 2.4.7 based on MySQL server 5.7.13 Linux (x86_64) (revision id: 05f1fcf)

Open source backup tool for InnoDB and XtraDB

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Usage: [xtrabackup [--defaults-file=#] --backup | xtrabackup [--defaults-file=#] --prepare] [OPTIONS]

Default options are read from the following files in the given order:

/etc/my.cnf /etc/mysql/my.cnf /usr/etc/my.cnf ~/.my.cnf

The following groups are read: xtrabackup mysqld

The following options may be given as the first argument:

--print-defaults	Print the program argument list and exit.
--no-defaults	Don't read default options from any option file, except for login file.
--defaults-file=#	Only read default options from the given file #.
--defaults-extra-file=#	Read this file after the global files are read.
--defaults-group-suffix=#	Also read groups with concat(group, suffix)
--login-path=#	Read this path from the login file.
-v, --version	print xtrabackup version information
--target-dir=name	destination directory
--backup	take backup to target-dir
--stats	calc statistic of datadir (offline mysqld is recommended)
--prepare	prepare a backup for starting mysql server on the backup.
--export	create files to import to another database when prepare.
--apply-log-only	stop recovery process not to progress LSN after applying log when prepare.
--print-param	print parameter of mysqld needed for copyback.
--use-memory=#	The value is used instead of buffer_pool_size
--throttle=#	limit count of IO operations (pairs of read&write) per second to IOS values (for '--backup')
--log[=name]	Ignored option for MySQL option compatibility
--log-copy-interval=#	time interval between checks done by log copying thread in milliseconds (default is 1 second).
--extra-lsmdir=name	(for --backup): save an extra copy of the xtrabackup_checkpoints file in this directory.
--incremental-lsn=name	(for --backup): copy only .ibd pages newer than specified LSN 'high:low'. ##ATTENTION## : If a wrong LSN value is specified, it is impossible to diagnose this, causing the

backup to be unusable. Be careful!

`--incremental-basedir=name`
(for `--backup`): copy only .ibd pages newer than backup at specified directory.

`--incremental-dir=name`
(for `--prepare`): apply .delta files and logfile in the specified directory.

`--to-archived-lsn=#` Don't apply archived logs with bigger log sequence number.

`--tables=name` filtering by regexp for table names.

`--tables-file=name` filtering by list of the exact database.table name in the file.

`--databases=name` filtering by list of databases.

`--databases-file=name`
filtering by list of databases in the file.

`--tables-exclude=name`
filtering by regexp for table names. Operates the same way as `--tables`, but matched names are excluded from backup. Note that this option has a higher priority than `--tables`.

`--databases-exclude=name`
Excluding databases based on name, Operates the same way as `--databases`, but matched names are excluded from backup. Note that this option has a higher priority than `--databases`.

`--create-ib-logfile` **** not work for now**** creates `ib_logfile*` also after '`--prepare`'. **###** If you want create `ib_logfile*`, only re-execute this command in same options. **###**

`--stream=name` Stream all backup files to the standard output in the specified format. Currently the only supported format is 'tar'.

`--compress[=name]` Compress individual backup files using the specified compression algorithm. Currently the only supported algorithm is 'quicklz'. It is also the default algorithm, i.e. the one used when `--compress` is used without an argument.

`--compress-threads=#`
Number of threads for parallel data compression. The default value is 1.

`--compress-chunk-size=#`
Size of working buffer(s) for compression threads in bytes. The default value is 64K.

`--encrypt=name` Encrypt individual backup files using the specified encryption algorithm.

`--encrypt-key=name` Encryption key to use.

`--encrypt-key-file=name`
File which contains encryption key to use.

`--encrypt-threads=#` Number of threads for parallel data encryption. The default value is 1.

`--encrypt-chunk-size=#`
Size of working buffer(S) for encryption threads in bytes. The default value is 64K.

`--compact` Create a compact backup by skipping secondary index pages.

`--rebuild-indexes` Rebuild secondary indexes in InnoDB tables after applying the log. Only has effect with `--prepare`.

`--rebuild-threads=#` Use this number of threads to rebuild indexes in a compact backup. Only has effect with `--prepare` and

--rebuild-indexes.

--incremental-force-scan
Perform a full-scan incremental backup even in the presence of changed page bitmap data

--close-files
do not keep files opened. Use at your own risk.

--core-file
Write core on fatal signals

--copy-back
Copy all the files in a previously made backup from the backup directory to their original locations.

--move-back
Move all the files in a previously made backup from the backup directory to the actual datadir location. Use with caution, as it removes backup files.

--galera-info
This options creates the xtrabackup_galera_info file which contains the local node state at the time of the backup. Option should be used when performing the backup of Percona-XtraDB-Cluster. Has no effect when backup locks are used to create the backup.

--slave-info
This option is useful when backing up a replication slave server. It prints the binary log position and name of the master server. It also writes this information to the "xtrabackup_slave_info" file as a "CHANGE MASTER" command. A new slave for this master can be set up by starting a slave server on this backup and issuing a "CHANGE MASTER" command with the binary log position saved in the "xtrabackup_slave_info" file.

--no-lock
Use this option to disable table lock with "FLUSH TABLES WITH READ LOCK". Use it only if ALL your tables are InnoDB and you DO NOT CARE about the binary log position of the backup. This option shouldn't be used if there are any DDL statements being executed or if any updates are happening on non-InnoDB tables (this includes the system MyISAM tables in the mysql database), otherwise it could lead to an inconsistent backup. If you are considering to use --no-lock because your backups are failing to acquire the lock, this could be because of incoming replication events preventing the lock from succeeding. Please try using --safe-slave-backup to momentarily stop the replication slave thread, this may help the backup to succeed and you then don't need to resort to using this option.

--safe-slave-backup
Stop slave SQL thread and wait to start backup until Slave_open_temp_tables in "SHOW STATUS" is zero. If there are no open temporary tables, the backup will take place, otherwise the SQL thread will be started and stopped until there are no open temporary tables. The backup will fail if Slave_open_temp_tables does not become zero after --safe-slave-backup-timeout seconds. The slave SQL thread will be restarted when the backup finishes.

--rsync
Uses the rsync utility to optimize local file transfers. When this option is specified, innobackupex uses rsync to copy all non-InnoDB files instead of spawning a separate cp for each file, which can be much faster for servers with a large number of databases or tables. This option cannot be used together with --stream.

--force-non-empty-directories
This option, when specified, makes --copy-back or --move-back transfer files to non-empty directories. Note that no existing files will be overwritten. If --copy-back or --move-back has to copy a file from the

backup directory which already exists in the destination directory, it will still fail with an error.

`--no-version-check` This option disables the version check which is enabled by the `--version-check` option.

`--no-backup-locks` This option controls if backup locks should be used instead of FLUSH TABLES WITH READ LOCK on the backup stage. The option has no effect when backup locks are not supported by the server. This option is enabled by default, disable with `--no-backup-locks`.

`--decompress` Decompresses all files with the .qp extension in a backup previously made with the `--compress` option.

`-u, --user=name` This option specifies the MySQL username used when connecting to the server, if that's not the current user. The option accepts a string argument. See `mysql --help` for details.

`-H, --host=name` This option specifies the host to use when connecting to the database server with TCP/IP. The option accepts a string argument. See `mysql --help` for details.

`-P, --port=#` This option specifies the port to use when connecting to the database server with TCP/IP. The option accepts a string argument. See `mysql --help` for details.

`-p, --password=name` This option specifies the password to use when connecting to the database. It accepts a string argument. See `mysql --help` for details.

`-S, --socket=name` This option specifies the socket to use when connecting to the local database server with a UNIX domain socket. The option accepts a string argument. See `mysql --help` for details.

`--incremental-history-name=name`
This option specifies the name of the backup series stored in the `PERCONA_SCHEMA.xtrabackup_history` history record to base an incremental backup on. Xtrabackup will search the history table looking for the most recent (highest `innodb_to_lsn`), successful backup in the series and take the `to_lsn` value to use as the starting `lsn` for the incremental backup. This will be mutually exclusive with `--incremental-history-uuid`, `--incremental-basedir` and `--incremental-lsn`. If no valid `lsn` can be found (no series by that name, no successful backups by that name) xtrabackup will return with an error. It is used with the `--incremental` option.

`--incremental-history-uuid=name`
This option specifies the UUID of the specific history record stored in the `PERCONA_SCHEMA.xtrabackup_history` to base an incremental backup on.
`--incremental-history-name`, `--incremental-basedir` and `--incremental-lsn`. If no valid `lsn` can be found (no success record with that `uuid`) xtrabackup will return with an error. It is used with the `--incremental` option.

`--decrypt=name` Decrypts all files with the .xbcrypt extension in a backup previously made with `--encrypt` option.

`--remove-original` Remove .qp and .xbcrypt files after decryption and decompression.

`--ftwrl-wait-query-type=name`
This option specifies which types of queries are allowed to complete before `innobackupex` will issue the global lock. Default is all.

`--kill-long-query-type=name`

This option specifies which types of queries should be killed to unblock the global lock. Default is "all".

`--history[=name]` This option enables the tracking of backup history in the PERCONA_SCHEMA.xtrabackup_history table. An optional history series name may be specified that will be placed with the history record for the current backup being taken.

`--kill-long-queries-timeout=#` This option specifies the number of seconds innobackupex waits between starting FLUSH TABLES WITH READ LOCK and killing those queries that block it. Default is 0 seconds, which means innobackupex will not attempt to kill any queries.

`--ftwrl-wait-timeout=#` This option specifies time in seconds that innobackupex should wait for queries that would block FTWRL before running it. If there are still such queries when the timeout expires, innobackupex terminates with an error. Default is 0, in which case innobackupex does not wait for queries to complete and starts FTWRL immediately.

`--ftwrl-wait-threshold=#` This option specifies the query run time threshold which is used by innobackupex to detect long-running queries with a non-zero value of `--ftwrl-wait-timeout`. FTWRL is not started until such long-running queries exist. This option has no effect if `--ftwrl-wait-timeout` is 0. Default value is 60 seconds.

`--debug-sleep-before-unlock=#` This is a debug-only option used by the XtraBackup test suite.

`--safe-slave-backup-timeout=#` How many seconds `--safe-slave-backup` should wait for Slave_open_temp_tables to become zero. (default 300)

`--binlog-info[=name]` This option controls how XtraBackup should retrieve server's binary log coordinates corresponding to the backup. Possible values are OFF, ON, LOCKLESS and AUTO. See the XtraBackup manual for more information

`--reencrypt-for-server-id=#` Re-encrypt tablespace keys for given server-id.

`--ssl-mode=name` SSL connection mode.

`--ssl` Deprecated. Use `--ssl-mode` instead. (Defaults to on; use `--skip-ssl` to disable.)

`--ssl-verify-server-cert` Deprecated. Use `--ssl-mode=VERIFY_IDENTITY` instead.

`--ssl-ca=name` CA file in PEM format.

`--ssl-capath=name` CA directory.

`--ssl-cert=name` X509 cert in PEM format.

`--ssl-cipher=name` SSL cipher to use.

`--ssl-key=name` X509 key in PEM format.

`--ssl-crl=name` Certificate revocation list.

`--ssl-crlpath=name` Certificate revocation list path.

`--tls-version=name` TLS version to use, permitted values are: TLSv1, TLSv1.1, TLSv1.2

`--server-public-key-path=name` File path to the server public RSA key in PEM format.

`-h, --datadir=name` Path to the database root.

`-t, --tmpdir=name` Path for temporary files. Several paths may be specified,

separated by a colon (:), in this case they are used in a round-robin fashion.

`--parallel=#` Number of threads to use for parallel datafiles transfer.
The default value is 1.

`--log[=name]` Ignored option for MySQL option compatibility

`--log-bin[=name]` Base name for the log sequence

`--innodb[=name]` Ignored option for MySQL option compatibility

`--innodb-adaptive-hash-index`
Enable InnoDB adaptive hash index (enabled by default).
Disable with `--skip-innodb-adaptive-hash-index`.
(Defaults to on; use `--skip-innodb-adaptive-hash-index` to disable.)

`--innodb-autoextend-increment=#`
Data file autoextend increment in megabytes

`--innodb-buffer-pool-size=#`
The size of the memory buffer InnoDB uses to cache data and indexes of its tables.

`--innodb-checksums` Enable InnoDB checksums validation (enabled by default).
Disable with `--skip-innodb-checksums`.
(Defaults to on; use `--skip-innodb-checksums` to disable.)

`--innodb-data-file-path=name`
Path to individual files and their sizes.

`--innodb-data-home-dir=name`
The common part for InnoDB table spaces.

`--innodb-doublewrite`
Enable InnoDB doublewrite buffer (enabled by default).
Disable with `--skip-innodb-doublewrite`.
(Defaults to on; use `--skip-innodb-doublewrite` to disable.)

`--innodb-io-capacity[=#]`
Number of IOPs the server can do. Tunes the background IO rate

`--innodb-file-io-threads=#`
Number of file I/O threads in InnoDB.

`--innodb-read-io-threads=#`
Number of background read I/O threads in InnoDB.

`--innodb-write-io-threads=#`
Number of background write I/O threads in InnoDB.

`--innodb-file-per-table`
Stores each InnoDB table to an `.ibd` file in the database dir.

`--innodb-flush-log-at-trx-commit[=#]`
Set to 0 (write and flush once per second), 1 (write and flush at each commit) or 2 (write at commit, flush once per second).

`--innodb-flush-method=name`
With which method to flush data.

`--innodb-force-recovery=#`
Helps to save your data in case the disk image of the database becomes corrupt.

`--innodb-log-arch-dir=name`
Where full logs should be archived.

`--innodb-log-buffer-size=#`
The size of the buffer which InnoDB uses to write log to the log files on disk.

`--innodb-log-file-size=#`
Size of each log file in a log group.

`--innodb-log-files-in-group=#`
Number of log files in the log group. InnoDB writes to the files in a circular fashion. Value 3 is recommended

here.

--innodb-log-group-home-dir=name
Path to InnoDB log files.

--innodb-max-dirty-pages-pct=#
Percentage of dirty pages allowed in bufferpool.

--innodb-open-files=#
How many files at the maximum InnoDB keeps open at the same time.

--innodb-use-native-aio
Use native AIO if supported on this platform.

--innodb-page-size=#
The universal page size of the database.

--innodb-log-block-size=#
The log block size of the transaction log file. Changing for created log file is not supported. Use on your own risk!

--innodb-fast-checksum
Change the algorithm of checksum for the whole of datapage to 4-bytes word based.

--innodb-doublewrite-file=name
Path to special datafile for doublewrite buffer. (default is : not used)

--innodb-buffer-pool-filename=name
Filename to/from which to dump/load the InnoDB buffer pool

--debug-sync=name
Debug sync point. This is only used by the xtrabackup test suite

--innodb-checksum-algorithm=name
The algorithm InnoDB uses for page checksumming. [CRC32, STRICT_CRC32, INNODB, STRICT_INNODB, NONE, STRICT_NONE]

--innodb-log-checksum-algorithm=name
The algorithm InnoDB uses for log checksumming. [CRC32, STRICT_CRC32, INNODB, STRICT_INNODB, NONE, STRICT_NONE]

--innodb-undo-directory=name
Directory where undo tablespace files live, this path can be absolute.

--innodb-undo-tablespaces=#
Number of undo tablespaces to use.

--defaults-group=name
defaults group in config file (default "mysqld").

--open-files-limit=#
the maximum number of file descriptors to reserve with setrlimit().

--redo-log-version=#
Redo log version of the backup. For --prepare only.

--keyring-file-data=name
The path to the keyring file.

--server-id=#
The server instance being backed up

Variables (--variable-name=value)

and boolean options {FALSE|TRUE} Value (after reading options)

datadir	/var/lib/mysql
tmpdir	/tmp
parallel	1
log	(No default value)
log-bin	mysql-bin
innodb	(No default value)

innodb-adaptive-hash-index	TRUE
innodb-autoextend-increment	8
innodb-buffer-pool-size	1073741824
innodb-checksums	TRUE
innodb-data-file-path	(No default value)
innodb-data-home-dir	(No default value)
innodb-doublewrite	TRUE
innodb-io-capacity	200
innodb-file-io-threads	4
innodb-read-io-threads	8
innodb-write-io-threads	8
innodb-file-per-table	TRUE
innodb-flush-log-at-trx-commit	1
innodb-flush-method	(No default value)
innodb-force-recovery	0
innodb-log-arch-dir	(No default value)
innodb-log-buffer-size	2097152
innodb-log-file-size	134217728
innodb-log-files-in-group	3
innodb-log-group-home-dir	(No default value)
innodb-max-dirty-pages-pct	90
innodb-open-files	500
innodb-use-native-aio	FALSE
innodb-page-size	16384
innodb-log-block-size	512
innodb-fast-checksum	FALSE
innodb-doublewrite-file	(No default value)
innodb-buffer-pool-filename	(No default value)
debug-sync	(No default value)
innodb-checksum-algorithm	innodb
innodb-log-checksum-algorithm	innodb
innodb-undo-directory	(No default value)
innodb-undo-tablespaces	0
defaults-group	mysqld
open-files-limit	65535
redo-log-version	1
keyring-file-data	(No default value)
server-id	1609201

Variables (--variable-name=value)

and boolean options {FALSE|TRUE} Value (after reading options)

version	FALSE
target-dir	/root/xtrabackup_backupfiles/
backup	FALSE
stats	FALSE
prepare	FALSE
export	FALSE
apply-log-only	FALSE
print-param	FALSE
use-memory	104857600
throttle	0
log	(No default value)
log-copy-interval	1000
extra-lsndir	(No default value)
incremental-lsn	(No default value)
incremental-basedir	(No default value)
incremental-dir	(No default value)

to-archived-lsn	0
tables	(No default value)
tables-file	(No default value)
databases	(No default value)
databases-file	(No default value)
tables-exclude	(No default value)
databases-exclude	(No default value)
create-ib-logfile	FALSE
stream	(No default value)
compress	(No default value)
compress-threads	1
compress-chunk-size	65536
encrypt	NONE
encrypt-key	(No default value)
encrypt-key-file	(No default value)
encrypt-threads	1
encrypt-chunk-size	65536
compact	FALSE
rebuild-indexes	FALSE
rebuild-threads	1
incremental-force-scan	FALSE
close-files	FALSE
copy-back	FALSE
move-back	FALSE
galera-info	FALSE
slave-info	FALSE
no-lock	FALSE
safe-slave-backup	FALSE
rsync	FALSE
force-non-empty-directories	FALSE
no-version-check	FALSE
no-backup-locks	FALSE
decompress	FALSE
user	(No default value)
host	(No default value)
port	0
socket	(No default value)
incremental-history-name	(No default value)
incremental-history-uuid	(No default value)
decrypt	NONE
remove-original	FALSE
ftwrl-wait-query-type	ALL
kill-long-query-type	SELECT
kill-long-queries-timeout	0
ftwrl-wait-timeout	0
ftwrl-wait-threshold	60
debug-sleep-before-unlock	0
safe-slave-backup-timeout	300
binlog-info	auto
reencrypt-for-server-id	0
ssl	TRUE
ssl-verify-server-cert	FALSE
ssl-ca	(No default value)
ssl-capath	(No default value)
ssl-cert	(No default value)
ssl-cipher	(No default value)
ssl-key	(No default value)
ssl-crl	(No default value)

ssl-crlpath	(No default value)
tls-version	TLSv1, TLSv1.1, TLSv1.2
server-public-key-path	(No default value)
[root@BkpV5Mysql01 ~]#	