

pt-table-sync 使用及help信息

参考：<http://opjasee.com/2015/05/25/synchronizes-data-efficiently-by-pt-table-sync.html>

eg：

```
pt-table-sync --sync-to-master h=172.16.x.x,u=root,p=XXXpassword --databases=bc_click_report --tables=fact_realtime_conversion --execute
```

eg：

```
pt-table-sync --sync-to-master h=B1.B2.B3.B4,u=checkdata,p=checkdata8s,P=6301 --databases=ymore --charset=utf8mb4 --print --execute
```

eg：

Sync db.tbl on host1 to host2:

```
pt-table-sync --execute h=host1,D=db,t=tbl h=host2
```

Sync all tables on host1 to host2 and host3:

```
pt-table-sync --execute host1 host2 host3
```

Make slavel have the same data as its replication master:

```
pt-table-sync --execute --sync-to-master slavel
```

Resolve differences that pt-table-checksum found on all slaves of master1:

```
pt-table-sync --execute --replicate test.checksum master1
```

Same as above but only resolve differences on slavel:

```
pt-table-sync --execute --replicate test.checksum \
```

```
--sync-to-master slavel
```

Sync master2 in a master-master replication configuration, where master2's copy of db.tbl is known or suspected to be incorrect:

```
pt-table-sync --execute --sync-to-master h=master2,D=db,t=tbl
```

```
[root@MysqlRestore ~]# pt-table-sync --help
```

pt-table-sync synchronizes data efficiently between MySQL tables. For more details, please use the --help option, or try 'perldoc /usr/bin/pt-table-sync' for complete documentation.

Usage: pt-table-sync [OPTIONS] DSN [DSN]

Options:

--algorithms=s	Algorithm to use when comparing the tables, in order of preference (default Chunk, Nibble, GroupBy, Stream)
--ask-pass	Prompt for a password when connecting to MySQL
--bidirectional	Enable bidirectional sync between first and subsequent hosts
--[no]bin-log	Log to the binary log (SET SQL_LOG_BIN=1) (default yes)
--buffer-in-mysql	Instruct MySQL to buffer queries in its memory
--[no]buffer-to-client	Fetch rows one-by-one from MySQL while comparing (default yes)
--charset=s	-A Default character set
--[no]check-child-tables	Check if --execute will adversely affect child tables (default yes)
--[no]check-master	With --sync-to-master, try to verify that the detected master is the real master (default yes)
--[no]check-slave	Check whether the destination server is a slave (default yes)
--[no]check-triggers	Check that no triggers are defined on the destination table (default yes)
--chunk-column=s	Chunk the table on this column
--chunk-index=s	Chunk the table using this index

```

--chunk-size=s      Number of rows or data size per chunk (default 1000)
--columns=a         -c Compare this comma-separated list of columns
--config=A          Read this comma-separated list of config files; if
                    specified, this must be the first option on the
                    command line
--conflict-column=s  Compare this column when rows conflict during a --
                    bidirectional sync
--conflict-comparison=s Choose the --conflict-column with this property as
                    the source
--conflict-error=s   How to report unresolvable conflicts and conflict
                    errors (default warn)
--conflict-threshold=s Amount by which one --conflict-column must exceed
                    the other
--conflict-value=s   Use this value for certain --conflict-comparison
--databases=h        -d Sync only this comma-separated list of databases
--defaults-file=s    -F Only read mysql options from the given file
--dry-run            Analyze, decide the sync algorithm to use, print
                    and exit
--engines=h          -e Sync only this comma-separated list of storage
                    engines
--execute            Execute queries to make the tables have identical
                    data
--explain-hosts      Print connection information and exit
--float-precision=i  Precision for FLOAT and DOUBLE number-to-string
                    conversion
--[no]foreign-key-checks Enable foreign key checks (SET FOREIGN_KEY_CHECKS=
                    1) (default yes)
--function=s         Which hash function you'd like to use for checksums
--help              Show help and exit
--[no]hex-blob       HEX() BLOB, TEXT and BINARY columns (default yes)
--host=s            -h Connect to host
--ignore-columns=H   Ignore this comma-separated list of column names in
                    comparisons
--ignore-databases=H Ignore this comma-separated list of databases
--ignore-engines=H   Ignore this comma-separated list of storage
                    engines (default FEDERATED, MRG_MyISAM)
--ignore-tables=H    Ignore this comma-separated list of tables
--[no]index-hint     Add FORCE/USE INDEX hints to the chunk and row
                    queries (default yes)
--lock=i            Lock tables: 0=none, 1=per sync cycle, 2=per table,
                    or 3=globally
--lock-and-rename    Lock the source and destination table, sync, then
                    swap names
--password=s         -p Password to use when connecting
--pid=s             Create the given PID file
--port=i            -P Port number to use for connection
--print             Print queries that will resolve differences
--recursion-method=a Preferred recursion method used to find slaves (
                    default processlist, hosts)
--replace           Write all INSERT and UPDATE statements as REPLACE
--replicate=s        Sync tables listed as different in this table
--set-vars=A         Set the MySQL variables in this comma-separated
                    list of variable=value pairs
--slave-password=s   Sets the password to be used to connect to the
                    slaves
--slave-user=s       Sets the user to be used to connect to the slaves
--socket=s          -S Socket file to use for connection
--sync-to-master     Treat the DSN as a slave and sync it to its master

```

<code>--tables=h</code>	<code>-t</code>	Sync only this comma-separated list of tables
<code>--timeout-ok</code>		Keep going if <code>--wait</code> fails
<code>--[no]transaction</code>		Use transactions instead of LOCK TABLES
<code>--trim</code>		TRIM() VARCHAR columns in BIT_XOR and ACCUM modes
<code>--[no]unique-checks</code>		Enable unique key checks (SET UNIQUE_CHECKS=1) (default yes)
<code>--user=s</code>	<code>-u</code>	User for login if not current user
<code>--verbose</code>	<code>-v</code>	Print results of sync operations
<code>--version</code>		Show version and exit
<code>--[no]version-check</code>		Check for the latest version of Percona Toolkit, MySQL, and other programs (default yes)
<code>--wait=m</code>	<code>-w</code>	How long to wait for slaves to catch up to their master. Optional suffix s=seconds, m=minutes, h=hours, d=days; if no suffix, s is used.
<code>--where=s</code>		WHERE clause to restrict syncing to part of the table
<code>--[no]zero-chunk</code>		Add a chunk for rows with zero or zero-equivalent values (default yes)

Filter:

`--ignore-tables-regex=s` Ignore tables whose names match the Perl regex

Option types: s=string, i=integer, f=float, h/H/a/A=comma-separated list, d=DSN, z=size, m=time

Rules:

Specify at least one of `--print`, `--execute`, or `--dry-run`.

`--where` and `--replicate` are mutually exclusive.

This tool accepts additional command-line arguments. Refer to the SYNOPSIS and usage information for details.

DSN syntax is `key=value[,key=value...]` Allowable DSN keys:

KEY	COPY	MEANING
===	===	=====
A	yes	Default character set
D	yes	Database containing the table to be synced
F	yes	Only read default options from the given file
P	yes	Port number to use for connection
S	yes	Socket file to use for connection
h	yes	Connect to host
p	yes	Password to use when connecting
t	yes	Table to be synced
u	yes	User for login if not current user

If the DSN is a bareword, the word is treated as the 'h' key.

Options and values after processing arguments:

<code>--algorithms</code>	Chunk, Nibble, GroupBy, Stream
<code>--ask-pass</code>	FALSE
<code>--bidirectional</code>	FALSE
<code>--bin-log</code>	TRUE
<code>--buffer-in-mysql</code>	FALSE
<code>--buffer-to-client</code>	TRUE
<code>--charset</code>	(No value)
<code>--check-child-tables</code>	TRUE
<code>--check-master</code>	TRUE

```

--check-slave                TRUE
--check-triggers             TRUE
--chunk-column               (No value)
--chunk-index                (No value)
--chunk-size                 1000
--columns                    (No value)
--config                     /etc/percona-toolkit/percona-toolkit.conf, /etc/percona-toolkit/pt-table-sync.conf, /root/.percona-
toolkit.conf, /root/.pt-table-sync.conf
--conflict-column            (No value)
--conflict-comparison        (No value)
--conflict-error             warn
--conflict-threshold         (No value)
--conflict-value             (No value)
--databases                  (No value)
--defaults-file              (No value)
--dry-run                    FALSE
--engines                    (No value)
--execute                    FALSE
--explain-hosts              FALSE
--float-precision            (No value)
--foreign-key-checks         TRUE
--function                   (No value)
--help                       TRUE
--hex-blob                   TRUE
--host                       (No value)
--ignore-columns             
--ignore-databases           
--ignore-engines              FEDERATED, MRG_MyISAM
--ignore-tables              
--ignore-tables-regex        (No value)
--index-hint                  TRUE
--lock                        (No value)
--lock-and-rename            FALSE
--password                   (No value)
--pid                        (No value)
--port                       (No value)
--print                       FALSE
--recursion-method            processlist, hosts
--replace                     FALSE
--replicate                   (No value)
--set-vars                   
--slave-password              (No value)
--slave-user                  (No value)
--socket                      (No value)
--sync-to-master              FALSE
--tables                      (No value)
--timeout-ok                  FALSE
--transaction                 FALSE
--trim                        FALSE
--unique-checks               TRUE
--user                        (No value)
--verbose                     0
--version                     FALSE
--version-check               TRUE
--wait                        (No value)
--where                       (No value)
--zero-chunk                  TRUE
[root@MysqlRestore ~]#

```

