

pt-table-checksum 使用及help信息

参考：http://seanlook.com/2015/12/29/mysql_replica_pt-table-checksum/

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[root@MysqlRestore ~]# pt-table-checksum --help
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pt-table-checksum performs an online replication consistency check by executing checksum queries on the master, which produces different results on replicas that are inconsistent with the master. The optional DSN specifies the master host. The tool's L<"EXIT STATUS"> is non-zero if any differences are found, or if any warnings or errors occur. For more details, please use the --help option, or try 'perldoc /usr/bin/pt-table-checksum' for complete documentation.

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

Options:

--binary-index	This option modifies the behavior of --create-replicate-table such that the replicate table's upper and lower boundary columns are created with the BLOB data type
--[no]check-binlog-format	Check that the binlog_format is the same on all servers (default yes)
--[no]check-plan	Check query execution plans for safety (default yes)
--chunk-index=s	Prefer this index for chunking tables
--chunk-index-columns=i	Use only this many left-most columns of a --chunk-index
--chunk-size=z	Number of rows to select for each checksum query (default 1000)
--chunk-time=f	Adjust the chunk size dynamically so each checksum query takes this long to execute (default 0.5)
--[no]create-replicate-table	Create the --replicate database and table if they do not exist (default yes)
--[no]empty-replicate-table	Delete previous checksums for each table before checksumming the table (default yes)
--float-precision=i	Precision for FLOAT and DOUBLE number-to-string conversion
--function=s	Hash function for checksums (FNV1A_64, MURMUR_HASH, SHA1, MD5, CRC32, etc)
--pause-file=s	Execution will be paused while the file specified by this param exists
--pid=s	Create the given PID file
--plugin=s	Perl module file that defines a pt_table_checksum_plugin class
--progress=a	Print progress reports to STDERR (default time,30)
--quiet	-q Print only the most important information (disables --progress) (default 0)
--recurse=i	Number of levels to recurse in the hierarchy when discovering replicas
--recursion-method=a	Preferred recursion method for discovering replicas. pt-table-checksum performs several REPLICA CHECKS before and while running (default processlist,hosts)
--replicate=s	Write checksum results to this table (

	default percona.checksums)
--[no]replicate-check	Check replicas for data differences after finishing each table (default yes)
--replicate-check-only	Check replicas for consistency without executing checksum queries
--replicate-check-retries=i	Retry checksum comparison this many times when a difference is encountered (default 1)
--replicate-database=s	USE only this database
--resume	Resume checksumming from the last completed chunk (disables --[no]empty-replicate-table)
--retries=i	Retry a chunk this many times when there is a nonfatal error (default 2)
--run-time=m	How long to run. Optional suffix s=seconds, m=minutes, h=hours, d=days; if no suffix, s is used.
--separator=s	The separator character used for CONCAT_WS() (default #)
--skip-check-slave-lag=d	DSN to skip when checking slave lag
--slave-password=s	Sets the password to be used to connect to the slaves
--slave-skip-tolerance=f	When a master table is marked to be checksummed in only one chunk but a slave table exceeds the maximum accepted size for this, the table is skipped (default 1.0)
--slave-user=s	Sets the user to be used to connect to the slaves
--trim	Add TRIM() to VARCHAR columns (helps when comparing 4.1 to >= 5.0)
--truncate-replicate-table	Truncate the replicate table before starting the checksum
--[no]version-check	Check for the latest version of Percona Toolkit, MySQL, and other programs (default yes)
--where=s	Do only rows matching this WHERE clause

Config:

--config=A	Read this comma-separated list of config files; if specified, this must be the first option on the command line
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Connection:

--ask-pass	Prompt for a password when connecting to MySQL
--defaults-file=s	-F Only read mysql options from the given file
--host=s	-h Host to connect to (default localhost)
--password=s	-p Password to use when connecting
--port=i	-P Port number to use for connection
--set-vars=A	Set the MySQL variables in this comma-separated list of variable=value pairs
--socket=s	-S Socket file to use for connection
--user=s	-u User for login if not current user

Filter:

--columns=a	-c Checksum only this comma-separated list of columns
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<code>--databases=h</code>	<code>-d</code> Only checksum this comma-separated list of databases
<code>--databases-regex=s</code>	Only checksum databases whose names match this Perl regex
<code>--engines=h</code>	<code>-e</code> Only checksum tables which use these storage engines
<code>--ignore-columns=H</code>	Ignore this comma-separated list of columns when calculating the checksum
<code>--ignore-databases=H</code>	Ignore this comma-separated list of databases
<code>--ignore-databases-regex=s</code>	Ignore databases whose names match this Perl regex
<code>--ignore-engines=H</code>	Ignore this comma-separated list of storage engines (default FEDERATED, MRG_MyISAM)
<code>--ignore-tables=H</code>	Ignore this comma-separated list of tables
<code>--ignore-tables-regex=s</code>	Ignore tables whose names match the Perl regex
<code>--tables=h</code>	<code>-t</code> Checksum only this comma-separated list of tables
<code>--tables-regex=s</code>	Checksum only tables whose names match this Perl regex

Help:

<code>--help</code>	Show help and exit
<code>--version</code>	Show version and exit

Output:

<code>--explain</code>	Show, but do not execute, checksum queries (disables <code>--[no]empty-replicate-table</code>) (default 0)
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Safety:

<code>--[no]check-replication-filters</code>	Do not checksum if any replication filters are set on any replicas (default yes)
<code>--[no]check-slave-tables</code>	Checks that tables on slaves exist and have all the checksum <code>--columns</code> (default yes)
<code>--chunk-size-limit=f</code>	Do not checksum chunks this much larger than the desired chunk size (default 2.0)

Throttle:

<code>--check-interval=m</code>	Sleep time between checks for <code>--max-lag</code> (default 1). Optional suffix s=seconds, m=minutes, h=hours, d=days; if no suffix, s is used.
<code>--check-slave-lag=s</code>	Pause checksumming until this replica's lag is less than <code>--max-lag</code>
<code>--max-lag=m</code>	Pause checksumming until all replicas' lag is less than this value (default 1s). Optional suffix s=seconds, m=minutes, h=hours, d=days; if no suffix, s is used.
<code>--max-load=A</code>	Examine SHOW GLOBAL STATUS after every chunk, and pause if any status variables are higher than the threshold (default <code>Threads_running=25</code>)

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

Rules:

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	no	DSN table database
F	yes	Defaults file for connection values
P	yes	Port number to use for connection
S	no	Socket file to use for connection
h	yes	Connect to host
p	yes	Password to use when connecting
t	no	DSN table table
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:

--ask-pass	FALSE
--binary-index	FALSE
--check-binlog-format	TRUE
--check-interval	1
--check-plan	TRUE
--check-replication-filters	TRUE
--check-slave-lag	(No value)
--check-slave-tables	TRUE
--chunk-index	(No value)
--chunk-index-columns	(No value)
--chunk-size	1000
--chunk-size-limit	2.0
--chunk-time	0.5
--columns	(No value)
--config	/etc/percona-toolkit/percona-toolkit.conf, /etc/percona-toolkit/pt-table-checksum.conf, /root/.percona-toolkit.conf, /root/.pt-table-checksum.conf
--create-replicate-table	TRUE
--databases	(No value)
--databases-regex	(No value)
--defaults-file	(No value)
--empty-replicate-table	TRUE
--engines	(No value)
--explain	0
--float-precision	(No value)
--function	(No value)
--help	TRUE
--host	localhost
--ignore-columns	
--ignore-databases	
--ignore-databases-regex	(No value)
--ignore-engines	FEDERATED, MRG_MyISAM
--ignore-tables	percona.checksums
--ignore-tables-regex	(No value)
--max-lag	1

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--max-load          Threads_running=25
--password          (No value)
--pause-file        (No value)
--pid               (No value)
--plugin            (No value)
--port              (No value)
--progress          time, 30
--quiet             0
--recurse           (No value)
--recursion-method  processlist, hosts
--replicate         percona.checksums
--replicate-check   TRUE
--replicate-check-only FALSE
--replicate-check-retries 1
--replicate-database (No value)
--resume            FALSE
--retries           2
--run-time          (No value)
--separator         #
--set-vars
--skip-check-slave-lag (No value)
--slave-password      (No value)
--slave-skip-tolerance 1.0
--slave-user          (No value)
--socket             (No value)
--tables             (No value)
--tables-regex        (No value)
--trim               FALSE
--truncate-replicate-table FALSE
--user               (No value)
--version            FALSE
--version-check       TRUE
--where              (No value)

```

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