事件排程器 Event Scheduler

1. 建立事件

語法：

create

[definer = {user | current\_user}]

Event

[if not exists]

<event\_name>

on schedule <schedule>

[on completion [not] preserve]

[enable | disable | disable on slave]

[comment ‘comment’]

do event\_body;

引數說明：

* event-name：事件名稱
* schedule：排程規則
  + at timestamp [+ interval <interval>] ...

| every interval

[starts timestamp [+ interval <interval>] ...]

[ends timestamp [+ interval interval]...]

>>> interval : quantity {year , quarter , month , day , hour , minute , week , second ,

Year\_month , day\_hour , day\_minute , day\_second , hour\_minute

, hour\_second , minute\_second}

* event-body：事件體，可以是單行SQL語法，或是begin ... end 語句塊

1. 檢視事件、刪除

* 檢視：show events;
* 刪除：drop event [if exists] <event\_name>;

1. 修改事件

alter

[definer = {user | current\_user}]

event <event\_name>

[on schedule <schedule>]

[on completion [not] preserve]

[enable | disable | disable on slave]

[comment ‘comment’]

[do <event\_body>]

1. 事件開啟 / 關閉

>>> 開啟

alter event <event\_name> on completion preserve disable;

>>> 關閉

Alter event <event\_name> on completion preserve enable;

1. 範例

* 新增：將myschema.mytable表中的mycol列，每小時新增1
  + create event myevent on schedule at current\_timestamp + interval 1 hour do update myschema.mytable set mycol = mycol +1 ;
  + 會在建立後的每個小時執行，設定的執行規則等價於：
    - Create event myevent on schedule every 1 hour starts current\_timestamp do update myschema.mytable set mycol = mycol +1 ;
  + 如果需要間隔一定的時間在開啟，例如1天後開啟：
    - Create event myevent on schedule every 1 hour starts current\_timestamp do update myschema.mytable set mycol = mycol + 1;
* do 執行的SQL可以是一個語句塊：

delimiter // >>> 更改結束詞

create event <event\_name>

on schedule every 5 second

do

begin

declare v integer;

declare continue handler for sql exception begin end;

set v = 0;

while v < 5 do

insert into t1 values (0);

update t2 set s1 = s1 + 1;

set v = v +1 ;

end while;

end //

delimiter ;

1. 檢視事件排程器狀態

* show variables like “event\_schedule”;
* select @@event\_schedule;
* show processlist;

>>> 檢視某個事件的執行狀況

* + - select \* from information\_schema.events;

1. 開啟(1/on) / 關閉(0/off)事件排程器

* set global event\_scheduler = 1;
* set @@global.event\_scheduler = 1;
* set global event\_scheduler = on;
* set @@global.event\_schedule = on;

1. 利用 procedure 建立 event

>>> 刪除 procedure

drop procedure [if exists] <procedure\_name>;

>>> 創建 procedure

delimiter //

create procedure <procedure\_name>()

begin

insert into mytable value(1);

end //

delimiter ;

>>> 建立 event

create event <event\_name>

on schedule every 1 second

on completion preserve disable

do call <procedure\_name>();

>>> 查看 procedure 狀態

show procedure status like ‘%test%’;