



链滴

on duplicate key update 的使用

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原文链接: <https://ld246.com/article/1640083578537>

来源网站: [链滴](#)

许可协议: [署名-相同方式共享 4.0 国际 \(CC BY-SA 4.0\)](#)



作用

`on duplicate key update`是MySQL的特有语法，作用就是：当表中没有记录时就插入，有的话就更新。这个有没有记录的依据就是主键或唯一索引，插入数据的主键或唯一索引表中存在就执行更新，否则执行插入。

基本用法

1.新建机构表，其中id为自增主键，tjcode为唯一索引。

```
DROP TABLE IF EXISTS `tjinfo_test`;
CREATE TABLE `tjinfo_test` (
  `id` int(11) NOT NULL AUTO_INCREMENT COMMENT '物理主键',
  `tjcode` varchar(20) CHARACTER SET utf8mb4 COLLATE utf8mb4_bin NOT NULL COMMENT '机构代码',
  `tjname` varchar(128) CHARACTER SET utf8mb4 COLLATE utf8mb4_bin NULL DEFAULT NULL COMMENT '机构名称',
  `tjlevel` varchar(2) CHARACTER SET utf8mb4 COLLATE utf8mb4_bin NULL DEFAULT NULL COMMENT '机构层级',
  `status` varchar(1) CHARACTER SET utf8mb4 COLLATE utf8mb4_bin NULL DEFAULT NULL COMMENT '机构状态',
  `utjcode` varchar(20) CHARACTER SET utf8mb4 COLLATE utf8mb4_bin NULL DEFAULT NULL COMMENT '上级机构',
  `created` datetime(0) NULL DEFAULT NULL COMMENT '创建时间',
  `modified` datetime(0) NULL DEFAULT NULL COMMENT '修改时间',
  PRIMARY KEY (`id`) USING BTREE,
  UNIQUE INDEX `uk_tjcode`(`tjcode`) USING BTREE
) ENGINE = InnoDB AUTO_INCREMENT = 1 CHARACTER SET = utf8mb4 COLLATE = utf8mb4
```

```
bin COMMENT = '机构表' ROW_FORMAT = Dynamic;
```

2.插入数据。

```
insert into tjinfo_test(tjcode, tjname, tjlevel, status, utjcode, created) values ('00000', '中国总公司', '1', '0', '0', now());
```

id	tjcode	tjname	tjlevel	status	utjcode	created	modified
1	00000	中国总公司	1	0	0	2021-12-21 15:57:54	(Null)

3.执行以下sql:

```
insert into tjinfo_test(tjcode, tjname, tjlevel, status, utjcode, created) values ('00001', '河南省公司', '2', '0', '00000', now())  
on duplicate key update tjname = '河南省公司1', tjlevel = '2', status = '0', utjcode = '00000', modified = now();
```

id	tjcode	tjname	tjlevel	status	utjcode	created	modified
1	00000	中国总公司	1	0	0	2021-12-21 15:57:54	(Null)
2	00001	河南省公司	2	0	00000	2021-12-21 15:59:34	(Null)

因为tjcode为00001的数据不存在，所以执行了插入values后面的数据。

4.再次执行上面这个sql。

id	tjcode	tjname	tjlevel	status	utjcode	created	modified
1	00000	中国总公司	1	0	0	2021-12-21 15:57:54	(Null)
2	00001	河南省公司1	2	0	00000	2021-12-21 15:59:34	2021-12-21 16:00:11

会发现tjname和modified变了，因为tjcode为00001的数据存在，所以对 **on duplicate key update** 面声明的字段进行了更新。

5.执行以下sql:

```
insert into tjinfo_test(tjcode, tjname, tjlevel, status, utjcode, created) values ('00001', '河南省公司1', '2', '0', '00000', now())  
on duplicate key update tjname = values(tjname), tjlevel = values(tjlevel), status = values(status), utjcode = values(utjcode), modified = now();
```

id	tjcode	tjname	tjlevel	status	utjcode	created	modified
1	00000	中国总公司	1	0	0	2021-12-21 15:57:54	(Null)
2	00001	河南省公司1	2	0	00000	2021-12-21 15:59:34	2021-12-21 16:09:39

发现和上面的sql效果一样， **tjname = values(tjname)**中values的作用就是将前面声明的，想要插入values()中的tjname字段拿过来。如果将 **tjname = values(tjname)**修改为 **tjname = tjname**则会将字段保持为原有值，不进行更新。这三种写法可以根据不同业务场景使用。

进阶用法

仅作格式示范，不作讲解。

1.insert into...select...on duplicate key update:

```
insert into tjinfo_test(tjcode, tjname, created) select tmptjcode, tmptjname, now() from tjinfo_mp  
on duplicate key update tjname = tmptjname, modified = now();
```

2.加上left join:

```
insert into cpic_ddzs_tjcode
(tjcode, tjname, tjlevel, status, utjcode, created)
select tmp.tmptjcode, tmp.tmptjname, tmp.tjlevel, tmp.status, tmp.utjcode, now() from
(select t1.tmptjcode, t1.tmptjname, t1.tjlevel, t1.status, t2.utjcode
from tjinfo_tmp t1
left join rlship_tmp t2 on t1.tmptjcode = t2.tmptjcode) as tmp
on duplicate key update
tjname = tmp.tmptjname, tjlevel = tmp.tjlevel, status = tmp.status,
utjcode = tmp.utjcode, modified = now()
```

3.加上case when:

```
insert into cpic_ddzs_tjcode
(tjcode, tjname, tjlevel, status, utjcode, created)
select tmp.tmptjcode, tmp.tmptjname, tmp.tjlevel, tmp.status, tmp.utjcode, now() from
(select t1.tmptjcode, t1.tmptjname, t2.utjcode,
case when t1.tjlevel = 'A' then '1' when t1.tjlevel = 'B' then '2' when t1.tjlevel = 'C' then '3'
else '4' end tjlevel,
case when t1.status = '01' then '0' else '2' end status
from tjinfo_tmp t1
left join rlship_tmp t2 on t1.tmptjcode = t2.tmptjcode) as tmp
on duplicate key update
tjname = tmp.tmptjname, tjlevel = tmp.tjlevel, status = tmp.status,
utjcode = tmp.utjcode, modified = now()
```
