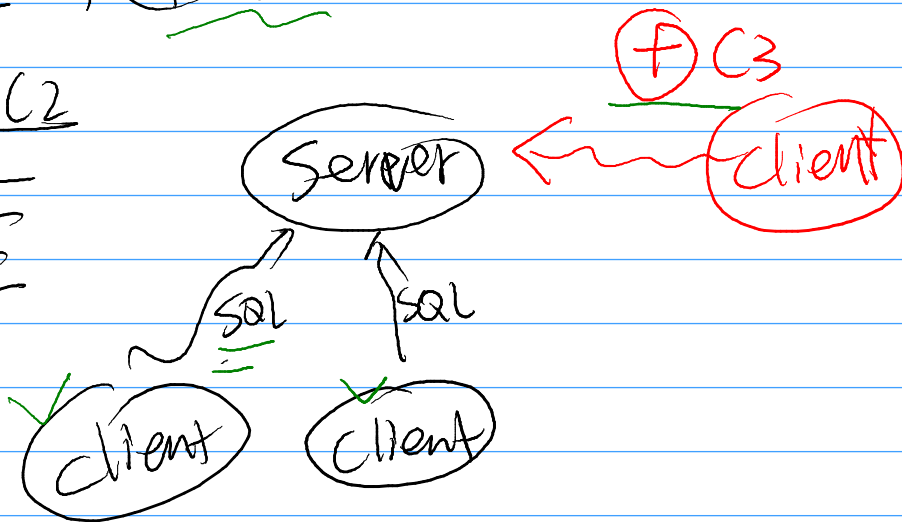


Online DDL, (在线)

to C1, C2
||
||
||



offline 离线

- ① COPY / IN PLACE
- ② 2018, Tencent GAME DBA, Instant Add Column
- ③ 2021年, Version 2.1, 8.0.29 with row format

COPY.

<u>MDL</u> X	t1	C1, C2	<u>LG</u>	<u>⊕ C3</u>
		r1		
		r2		
		r3		

①

表结构

t2	C1, C2, C3	<u>LG</u>
	r1	
	r2	
	r3	

②

LG

t1	C1, C2, C3
	r1
	r2
	r3

② Lock, MDL (只读)

③ 执行DDL

④ COPY 数 COPY COPY 事务

⑤ 释放锁

⑥ 重新命名表 \Rightarrow t1,

INPLACE

① 省去临时表空间. LG \Rightarrow 不 ~~改~~

Instant

"se_private_data": "✓instant_col=3",

tpl,	k ₁ , c ₁ , c ₂ , c ₃ , c ₄	Instant_flag
r1	(1, aaa, b, Null , 0)	⊗
r2	(2, ccc, dddd, ee, 0)	✓

3种情况: case 1: 无 Instant, ⇒ 3

case 2: 有 Instant, Instant_col=7

8, 0, 12 ⇒ r0 (解析) ⇒

Version

tl	K ₁	C ₁	C ₂	C ₃	C ₄	row-version
✓ r ₁	1	aa	b	? 0
✓ r ₂	2	ccc	dddd	ee	1
✓ r ₃	3	1111	2222	3333	4444	2

data/rtc → hexdump -C -s 0x10000 -n 256 t01.ibd

```

00010000 67 bd 69 d1 00 00 00 04 ff ff ff ff ff ff ff ff |g.i.....|
00010010 00 00 00 00 7a cd 22 b4 45 bf 00 00 00 00 00 00 |....z."E.....|
00010020 00 00 00 00 00 52 00 02 00 f7 80 05 00 00 00 00 |....R.....|
00010030 00 d0 00 02 00 02 00 03 00 00 00 00 00 00 00 00 |.....|
00010040 00 00 00 00 00 00 00 00 01 06 00 00 00 52 00 00 |.....R..|
00010050 00 02 02 72 00 00 00 52 00 00 00 02 01 b2 01 00 |...r...R.....|
00010060 02 00 1d 69 6e 66 69 6d 75 6d 00 04 00 0b 00 00 |...infimum.....|
00010070 73 75 70 72 65 6d 75 6d 01 03 00 00 00 10 00 25 |supremum.....%|
00010080 00 00 00 00 07 02 00 00 00 50 50 dd 82 00 00 00 |...PP.....|
00010090 fa 01 10 80 00 00 01 61 61 61 62 02 04 03 00 01 |.....aadb.....|
000100a0 40 00 18 00 2b 00 00 00 00 07 03 00 00 00 50 50 |@...+.....PP|
000100b0 e7 81 00 00 01 e5 01 10 80 00 00 02 63 63 63 64 |.....cccd|
000100c0 64 64 64 65 65 04 04 04 04 00 02 40 00 20 ff a0 |dddee.....@. ...|
000100d0 00 00 00 00 07 04 00 00 00 50 50 f1 82 00 00 02 |.....PP.....|
000100e0 06 01 10 80 00 00 03 31 31 31 31 32 32 32 32 33 |.....111122223|
000100f0 33 33 33 34 34 34 34 00 00 00 00 00 00 00 00 00 |3334444.....|
00010100

```

Version=2