# 数据一致性检验规则

### Consistency check for district, orders and new\_orders

执行如下SQL:

```
select d_next_o_id from district where d_w_id=:w_id and d_id=:d_id;
select MAX(o_id) as max_o_id from orders where o_w_id=:w_id and o_d_id=:d_id;
select MAX(no_o_id) as max_no_o_id from new_orders where no_w_id=:w_id and
no_d_id=:d_id;
```

要求对于每个(w\_id, d\_id),满足 $d_next_o_id - 1 = max(o_id) = max(no_o_id)$ 

#### Consistency check for new\_orders

执行如下SQL:

```
select COUNT(no_o_id) as count_no_o_id from new_orders where no_w_id=:w_id and
no_d_id=:d_id;
select MAX(no_o_id) as max_no_o_id from new_orders where no_w_id=:w_id and
no_d_id=:d_id;
select MIN(no_o_id) as min_no_o_id from new_orders where no_w_id=:w_id and
no_d_id=:d_id;
```

要求对于每个(w\_id, d\_id),满足 $count(no\_o\_id) = max(no\_o\_id) - min(no\_o\_id) + 1$ 

#### Consistency check for orders and order\_line

执行如下SQL:

```
select SUM(o_ol_cnt) as sum_ol_cnt from orders where o_w_id=:w_id and o_d_id=:d_id;
select COUNT(ol_o_id) as count_ol_o_id from order_line where ol_w_id=:w_id and
ol_d_id=:d_id;
```

要求对于每个(w\_id, d\_id),满足 $sum(o\_ol\_cnt) = count(ol\_o\_id)$ 

## Consistency check for orders

select COUNT(\*) as count\_orders from orders;

要求*orders*表元组数量等于初始化元组数量加执行 new order 事务数量。