

2019PostgreSQL杭州沙龙活动



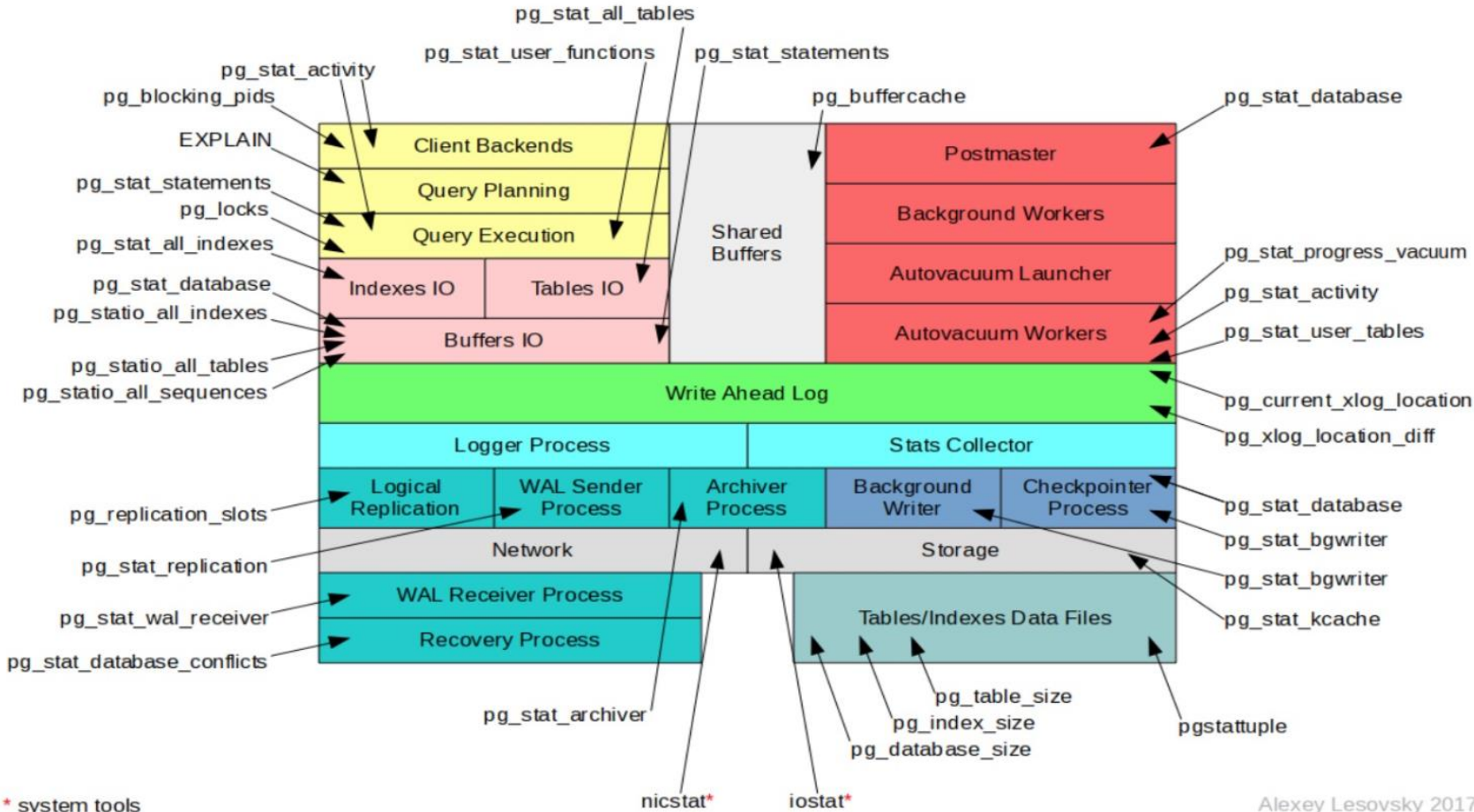
# PostgreSQL数据库统计信息

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# PostgreSQL统计信息概览



\* system tools

# pg\_stat\_user\_tables

relid		102864573
schemaname		public
relname		table
seq_scan		0
seq_tup_read		0
idx_scan		18892172
idx_tup_fetch		67978590488
n_tup_ins		7019292
n_tup_upd		0
n_tup_del		0
n_tup_hot_upd		0
n_live_tup		7019292
n_dead_tup		0
n_mod_since_analyze		7019292
last_vacuum		
last_autovacuum		
last_analyze		
last_autoanalyze		
vacuum_count		0
autovacuum_count		0
analyze_count		0
autoanalyze_count		0

relid		102069
schemaname		public
relname		table
seq_scan		29701054
seq_tup_read		475216864
idx_scan		0
idx_tup_fetch		0
n_tup_ins		0
n_tup_upd		0
n_tup_del		0
n_tup_hot_upd		0
n_live_tup		16
n_dead_tup		0
n_mod_since_analyze		0
last_vacuum		
last_autovacuum		2019-04-17 21:09:33.790362+08
last_analyze		
last_autoanalyze		
vacuum_count		0
autovacuum_count		2
analyze_count		0
autoanalyze_count		0

seq\_tup\_read=全表扫描行数=table\_tuple\_return

idx\_tup\_fetch=索引返回数据行数+通过tid返回的数据行数=index\_tuple\_fetch+table\_tuple\_fetch



# pg\_stat\_user\_index

idx_scan	idx_tup_read	idx_tup_fetch
1194234	0	0
89757597	2605428594	2580926684
4223353	23584815044	0
0	0	0

idx\_scan=扫描索引次数

idx\_tup\_read=扫描索引的行数=index\_tuple\_return

idx\_tup\_fetch=通过index scan返回的数据行数(不包含bitmap scan)=index\_tuple\_fetch

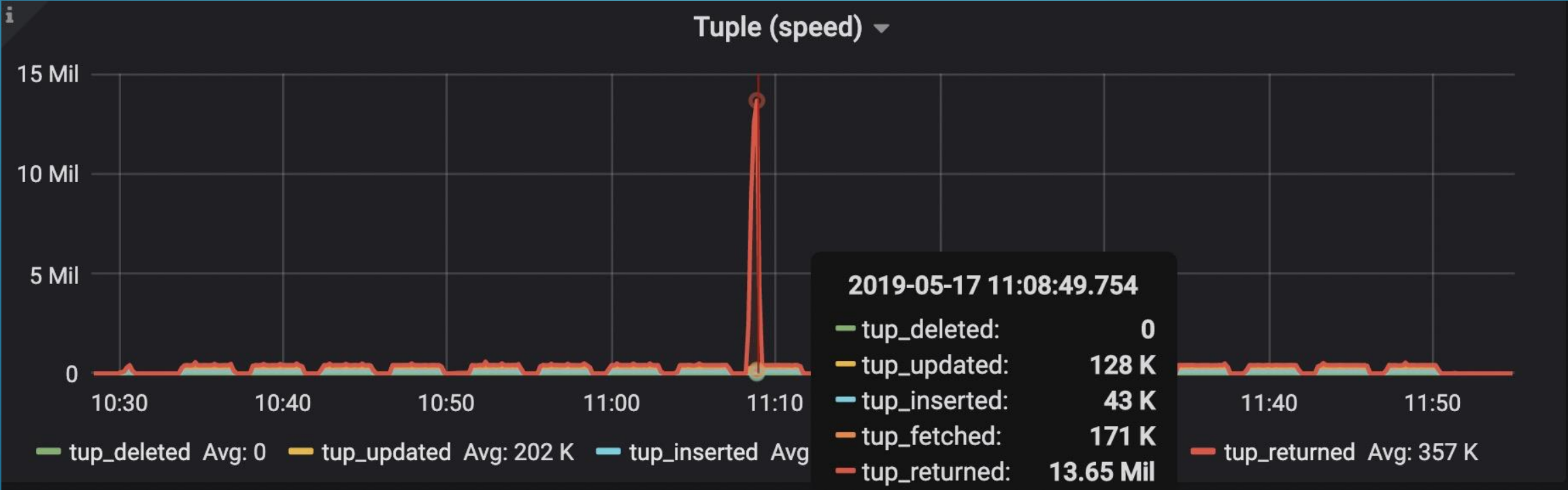
# pg\_stat\_database

datid		16395
datname		camp
numbackends		3006
xact_commit		133555223
xact_rollback		22527
blks_read		3169263114
blks_hit		131672249022
blks_icache_hit		0
tup_returned		108576840861
tup_fetched		107854398721
tup_inserted		14197990
tup_updated		6069944
tup_deleted		328
conflicts		0
temp_files		0
temp_bytes		0
deadlocks		0
blk_read_time		14786686.821
blk_write_time		2554.011
stats_reset		30-APR-19 15:36:08.455714 +08:00

datid		99522524
datname		algo
numbackends		55
xact_commit		7763004
xact_rollback		1882
blks_read		2908879
blks_hit		1090935955
blks_icache_hit		0
tup_returned		25362191552
tup_fetched		44626468
tup_inserted		45821
tup_updated		5434
tup_deleted		17141
conflicts		0
temp_files		0
temp_bytes		0
deadlocks		0
blk_read_time		18542.595
blk_write_time		17.804
stats_reset		05-NOV-18 14:42:28.321625 +08:00



# pg\_stat\_database



# pg\_stat\_bgwriter

```
checkpoints_timed | 5913
checkpoints_req   | 0
checkpoint_write_time | 1370634976
checkpoint_sync_time | 3571
buffers_checkpoint | 120020827
buffers_clean     | 150023082
maxwritten_clean  | 5
buffers_backend   | 69917468
buffers_backend_fsync | 0
buffers_alloc     | 77869167931
stats_reset       | 16-JAN-19 19:53:13.045833 +08:00
```

```
checkpoints_timed | 3353
checkpoints_req   | 8807
checkpoint_write_time | 2030317503
checkpoint_sync_time | 56703207
buffers_checkpoint | 1750842484
buffers_clean     | 19801168
maxwritten_clean  | 56521
buffers_backend   | 261486934
buffers_backend_fsync | 0
buffers_alloc     | 1115963483
stats_reset       | 2019-04-22 22:16:39.967804+08
```

## 相关参数：

max\_wal\_size

checkpoint\_timeout

checkpoint\_completion\_target

bgwriter\_lru\_maxpages

# pg\_stat\_statements

userid	10	#用户id
dbid	12917	#数据库oid
queryid	4390283800491518311	#sql进行归一化后的hash值
query	select version()	#sql归一化后的内容
calls	1	#执行次数
total_time	0.208	#sql总共的执行时间
min_time	0.208	#sql最小的执行时间
max_time	0.208	#sql最大的执行时间
mean_time	0.208	#sql平均的执行时间
stddev_time	0	#sql花费时间的表中偏差
rows	1	#sql返回或者影响的行数
shared_blks_hit	0	#sql在shared_buffer中命中的块数
shared_blks_read	0	#sql从page cache或者磁盘中读取的块数
shared_blks_dirtied	0	#sql语句弄脏的shared_buffer的块数
shared_blks_written	0	#sql语句写入的块数
local_blks_hit	0	#临时表中命中的块数
local_blks_read	0	#临时表需要读的块数
local_blks_dirtied	0	#临时表弄脏的块数
local_blks_written	0	#临时表写入的块数
temp_blks_read	0	#从临时文件读取的块数
temp_blks_written	0	#从临时文件写入的数据块数
blk_read_time	0	#从磁盘或者读取花费的时间
blk_write_time	0	#从磁盘写入花费的时间



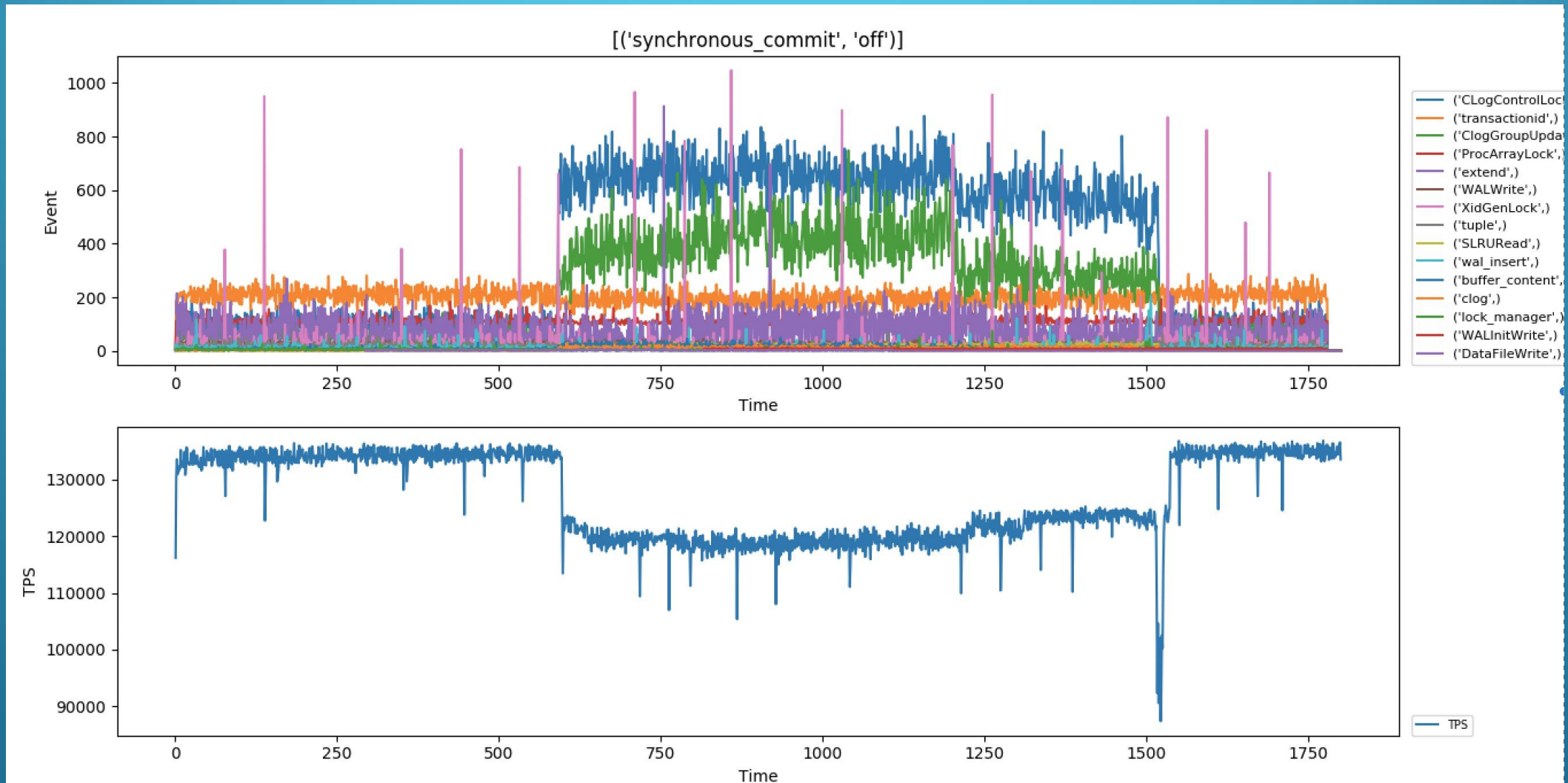
# pg\_wait\_sampling

外部插件

收集所有会话中的等待事件信息

pid	event_type	event	queryid	count
74770	Activity	AutoVacuumMain	0	4445
74827	Client	ClientRead	0	4338
74773	Activity	LogicalLauncherMain	0	4446
74827	IO	DataFileRead	3271612687	1
74827	IO	DataFileRead	0	5
74768	Activity	BgWriterMain	0	4438
74767	Activity	CheckpointerMain	0	4447
74769	Activity	WalWriterMain	0	4443

# pg\_wait\_sampling



# Questions?



该截图显示了一张来自钉钉（DingTalk）的虚拟名片。名片顶部左侧显示了用户名为“绛云”（Jingyun），并带有蓝色的认证标志，下方标注了“阿里巴巴”（Alibaba）。名片右侧包含一个圆形的头像，显示的是夜空中的星云，以及“Alibaba Group”的标志。名片中间部分包含提示文字“长按图片二维码，收下我的名片”（长按图片二维码，收下我的名片），下方是一个标准的QR码。名片底部显示了钉钉的Logo和“钉钉 阿里巴巴旗下品牌”（DingTalk Alibaba Group Brand）字样。

# Thanks

