

s1s压测复盘

1、回顾目标。

对每个接口进行评估：

- 延时要求(ms):
 - 每一个接口的延时要求，需要和上游系统对齐，如果是
- 容量预期(QPS):
 - 每一个接口的容量预期，需要和上游系统对齐，如果不是单次调用，则给出QPS计算方法。
- 实际压测延时:
 - 压测中的实际延时
- 实际压测容量:
 - 压测中的实际容量（需要压测到极限）
- 延时瓶颈:
 - 描述延时瓶颈点（某一个模块）
- 容量瓶颈:
 - 描述容量瓶颈点（压测到极限时候，调用链路上的瓶颈）
- 是否满足:
 - 是否满足本次大促的要求（如果不满足，**标红**）

对多国家多服务多接口进行混合场景压测：

- 延时要求(ms):
 - 每个服务高频接口的延时要求，需要和上游系统对齐，如果是
- 容量预期(QPS):
 - 每个服务高频接口的容量预期，需要和上游系统对齐，如果不是单次调用，则给出QPS计算方法。
- 实际压测延时:
 - 压测中的实际延时
- 实际压测容量:
 - 压测中的实际容量（需要压测到极限）
- 延时瓶颈:
 - 描述延时瓶颈点（某一个模块）

2、评估结果。（把结果与预期目标对比，评估哪些地方做得好？哪些未达到预期？）

实际压测数据：

1. 单接口在单实例下，QPS有否满足预期评估

								单实例QPS有否满足预期							资源压测到极限时（cpu使用率90%以上或延时超过1秒,或基础组件出现报错，或基础组件延时太长时）									
服务	国家	接口	预期QPS/秒	预期单实例QPS	延时要求 (ms)	延时瓶颈	容量瓶颈	是否满足	wrk并发数	实际压测avg延时	实际压测90延时	实际压测99延时	使用cpu率	实际实例数	单实例QPS	wrk并发连接数	实际压测avg延时	实际压测90延时	实际压测99延时	实际压测容量（QPS）	使用cpu实例数	延时瓶颈		
	ID	/api/v3/logistics/calculate_esf_wit h_distance/	75000	2000	1000	无	无	是	100	46.60ms	114.93ms	383.78ms	60%	18.51742119	4050.24	100	46.60ms	114.93ms	383.78ms	4050.24	60% 1	API.sls.shopeemobile.com 1,027,677 9 0.0009% Log View 0.4 3,240.3 22.8 55.0 300.0 24.3 508.0 MySQL:shopee_payment_backend.slave 4,142 0 0.0000% Log View 0.7 1,217.4 454.2 1,050.0 1,200.0 307.7 2.0		
SLS GO Service 单接口	ID	/api/v3/locations/calculate/ batch_courier_delivery_time/	30000	2000	1000	无	无	是	50	5.37ms	6.50ms	55.02ms	65%	1.767739115	16970.83	80	5.46ms	8.37ms	59.40ms	20665.61	89% 1	MySQL:shopee_payment_backend.slave 7,825 0 0.0000% Log View 0.7 1,219.9 420.1 1,050.0 1,200.0 298.7 2.2		
	ID	/api/v3/logistics/channels/ batch_calculate_chargeable_weight/	20100	2000	1000	无	无	是	50	10.99ms	15.88ms	155.76ms	70%	2.424985311	8288.71	100	14.08ms	23.20ms	113.31ms	8970.63	78% 1	SpexService:item.item_info.get_item_list_using_cache 2,175,993 181 0.0083% Log View 1.6 304.8 6.8 15.0 140.0 9.1 1,718.8 100.00%		
	ID	/api/v3/logistics/item/ batch_check_item_ship_to/	5100	2000	1000	无	无	是	2	446.56us	500.00us	2.21ms	22% 1	5368.69	30	1.51ms	3.13ms	8.07ms	25496.26	87% 1	MySQL:shopee_payment_backend.slave 10,016 0 0.0000% Log View 0.7 1,253.2 378.1 806.8 933.1 269.3 4.8			
	ID	/api/v3/logistics/buyer/	10200	2000	1000	无	无	是	7	13.38ms	4.26ms	457.26ms	23% 1	1019.885	30	10.84ms	3.47ms	384.77ms	27495.45	76% 1	MySQL:logistic.slave:ogistic_buyer_tab:select 6,036,053 0 0.0000% Log View 0.2 772.3 0.8 1.3 17.0 3.7 1,676.7 99.98%			

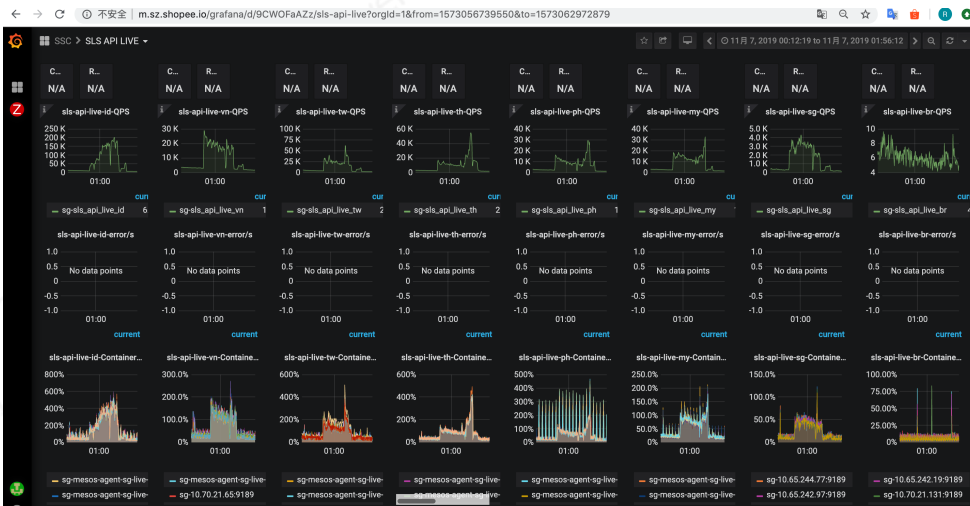
	ID	/api/v3/logistics/channels/ batch_validate_checkout_items _shipped_by_channel/	5700	2000	1000	无	无	是	28	22.15ms	51.6ms	256.23ms	21%	1	5751.76	120	28.72ms	61.08ms	348.81ms	18500.92	70.150%	1	APISLS.shoepemobile.com/api/logistic/batch_check_service_ability/ 246,693.42 0.0170% Log View 15.1 1,003.2 39.3 70.0 350.0 34.5 104.9 100.00% SpexService:item.item_info.get_item_model_using_cache 555,413 46,670 8.4028% Log View 0 998.6 4.8 8.0 433.3 25.0 256.8 49.99% SpexService:item.item_info.get_item_list_using_cache 555,707 1,115 0.2006% Log View 0 306.6 5.7 10.0 250.0 17.9 256.9 50.01%
	ID	/api/v3/logistics/shop/channels/batch	5100	2000	1000	无	无	是	40	14.13ms	21.86ms	120.49ms	67%	1.332458962	3827.51	70	20.12ms	32.38ms	158.29ms	4575.69	85%	1	SpexService: account.core.get_shop 1,550,371 0 0.0000% Log View 1 392.9 3.4 8.0 120.0 8.3 951.7 99.87% MySQL:MySQL.default.slave:logistic_location_tab:select 4 0 0.0000% Log View 1,978 3,666.8 2,478.2 3,125.0 3,125.0 692.2 0.0 0.01%
	ID	/api/v3/logistics/address/ batch_can_cod_pickup/	5100	2000	1000	无	无	是	30	21.41ms	48.21ms	203.12ms	65%	2.055349348	2481.33	55	26.97ms	60.45ms	209.83ms	3227.12	80%	1	APISLS.shoepemobile.com 43,902 3 0.0068% Log View 14.9 1,001.2 30.2 40.0 350.0 36.9 18.0 MySQL:logistic.slave:logistics_courier_delivery_time_tab:select 81 0 0.0000% Log View 0.7 100.3 17.8 80.0 80.0 20.6 0.0 0.01%
MY	/api/v3/logistics/channels/get/	2000	2000	1000	无	无	是	2	0.91ms	0.93ms	3.98ms	12.80%	1	2338.05	50	8.43ms	21.35ms	51.29ms	9123.46	85%	1	SpexService 40,788 16 0.0392% Log View 1.8 299.6 3.3 4.0 26.7 6.4 26.7	
TW	/api/v3/logistics/address/	10500	2000	1000	无	无	是	30	13.39ms	14.02ms	190.59ms	68	1.87518417	5599.45	60	12.82ms	18.51ms	161.75ms	7020.1	86	1	MySQL:logistic.slave 2,404,829 0 0.0000% Log View 0.2 171 1.2 3.0 45.0 2.7 944.	
VN	/api/v3/logistics/calculate_esf_with_distance/	12000	2000	1000	无	无	是	100	45.86	108.67	285.03	65	4.402102738	2725.97	600.00	146.05	487.63	1.23s	3366.68	85	1	MySQL:logistic.slave 248,987 0 0.0000% Log View 0.2 5,492.2 91.7 316.7 1,683.6 164.6	
VN	/api/v3/locations/calculate/ batch_courier_delivery_time/	13400	2000	1000	无	无	是	30	5.28ms	34.99ms	100.20ms	65	0.9738004087	1376.052	130	6.55ms	9.55ms	61.17ms	26628.64	82			
SLS Checkout Service	ID	/api/v2/logistics/batch_get/	12600	130	1000	无	无	是	10	29.65ms	52.22ms	107.71ms	68%	33.91838053	371.48	17	35.46ms	64.92ms	113.51ms	512.06	93%	1	MySQL.shopee_logistic_id_db 255,794 0 0.0000% Log View 0.3 639 12.0 49.6 167.8 20.9 76.5
	ID	/api/logistics/buyer/checkout_free_shipping/	2520	130	#N/A	无	无	是	10	16.62ms	27.86ms	86.18ms	65%	3.637623419	692.76	20	26.15ms	52.20ms	130.54ms	912.14	91.150%	1	MySQL.shopee_backend_id_db 139,624 0 0.0000% Log View 0.4 469.2 4.5 17.3 132.8 10.8 78.1
	ID	/api/locations/days_to_deliver/sender/ :sender_userid/:sender_addressid/ recipient/:recipient_use	2250	130	#N/A	无	无	是	15	39.68ms	65.66ms	114.20ms	65%	5.768343332	390.06	30	63.63ms	111.47ms	170.92ms	488.61	94%	1	MySQL.shopee_backend_id_db 208,168 0 0.0000% Log View 0.4 469.2 4.7 18.7 103.9 10.0 68.7 MySQL.shopee_account_db 126,026 0 0.0000% Log View 0.8 1,059.8 5.9 20.6 113.9 11.4 41.6
SLS Logistic Service	ID	/api/logistics/sizes/calculate_v2/	2400	130	1000	无	无	是	10	41.13ms	104.94ms	344.69ms	65%	4.625614339	518.85	17	43.39ms	117.90ms	289.43ms	757.4	89%	1	MySQL.shopee_backend_id_db 14,716 0 0.0000% Log View 0.4 251.8 4.1 13.7 132.4 11.1 84.6 MySQL.shopee_account_db 7,728 0 0.0000% Log View 0.7 349.5 9.0 39.4 178.2 20.3 44.4
	ID	/api/logistics/pickup/days/	2760	130	1000	无	无	是	10	41.24ms	69.70ms	137.09ms	68%	10.84436761	254.51	17	61.72ms	94.71ms	413.36ms	322.61	91%	1	MySQL.shopee_account_db 73,898 0 0.0000% Log View 0.8 620.5 8.9 35.0 173.9 16.6 84.2
	SG	/api/v2/logistics/shop/whs_info/	200	130	1000	无	无	是	2	8.46ms	9.63ms	14.30ms	24%	1	238.42								
						无	无																
SLS TSF Service	PH	/api/logistics/order/tracking/info/	1840	2000	1000	无	无	是	10	6.06ms	8.84ms	35.68ms	20%	1	2145.6	70	12.00ms	18.53ms	49.47ms	7461.58	85%	1	SpexService 1,735,411 0 0.0000% Log View 1.7 891.5 4.6 10.0 49.8 5.5 855.3 MySQL:logistic.slave 3,206,035 0 0.0000% Log View 0.1 137.1 1.1 2.0 18.3 1.6 1,580.1
	PH	/api/logistics/sizes/get/	1168	2000	1000	无	无	是	1	215.55us	207.00us	342.00us	4.50%	1	5508.3	35	1.00ms	1.94ms	4.28ms	41428.71	58%		
	SG	/api/logistics/get/	900	2000	1000	无	无	是	1	0.88ms	0.86ms	4.11ms	20%	1	2308.45	50	3.68ms	7.66ms	18.42ms	17148.09	90%	1	MySQL:logistic.slave 3,449,684 195 0.0057% Log View 0.1 188.2 1.4 4.0 20.0 2.4 1,292.5
	SG	/api/v2/logistics/batch_get/	900	2000	1000	无	无	是	8	19.02ms	61.73ms	115.77ms	30.80%	1	2094.1	90	22.90ms	65.98ms	142.18ms	6746.54	84%	1	SpexService:order.order_info.get_order_list_by_id_list 961,113 212 0.0221% Log View 2.1 1,000.9 8.5 30.0 140.0 23.3 279.0 97.15%
	VN	/api/v2/logistics/order/tracking/info/	6000	2000	1000	无	无	是	38	8.83ms	11.86ms	45.86ms	64%	1	6260.28	70	10.68ms	18.64ms	51.57ms	7694.74	78%	1	SpexService 2,264,118 6,437 0.2843% Log View 0.6 1,001.6 4.7 10.0 58.6 9.5 1,863.4 MySQL:logistic.slave 3,853,066 0 0.0000% Log View 0.2 216.1 1.4 4.1 20.9 2.8 3,171.2
VN	/api/v2/logistics/get_all_tracking_info/	4000	2000	1000	无	无	是	28	7.18ms	10.88ms	37.20ms	56%	1	4558.49	60	10.05ms	16.49ms	42.63ms	7024.16	85%	1	SpexService:order.order_info.get_order_list_by_id_list 3,571,516 133 0.0037% Log View 2 1,002.4 4.9 10.0 60.0 8.8 1,978.7 92.71%	
							否																

SLS Calculate Service	ALL	/api/logistic/batch_get_sls_tn_by_ordersn	1250	130	34.9	无	无	是	5	34.94ms	37.05ms	146.15ms	0.63	8.261731659	151.3	10	45.41ms	67.99ms	188.85ms	236.16	0.95	1	MySQL.shopee_sls_logistic_my_db 100,091 0 0.0000% Log View 0.6 300.5 4.2 25.6 86.2 9.7 92.6
	ALL	/api/logistic/first_mile/batch_get_fm_tn	1000	130	24.5	无	无	是	5	24.90ms	27.33ms	40.19ms	0.66	4.94144389	202.37	8	25.39ms	28.24ms	43.81ms	316.67	0.94	1	
	ALL	/api/logistic/calculate_estimated_shipping_fee	1500	130	18.1	无	无	是	5	24.54ms	23.29ms	39.42ms	0.65	5.797773655	258.72	7	20.38ms	23.87ms	33.19ms	355.24	0.92	1	
check service	ALL	/api/logistic/check_service_availability	12250	130		无	无	是	5	26.14ms	23.52ms	296.76ms	0.69	50.23168081	243.87	7	25.20ms	24.18ms	116.90ms	326.17	0.9	1	

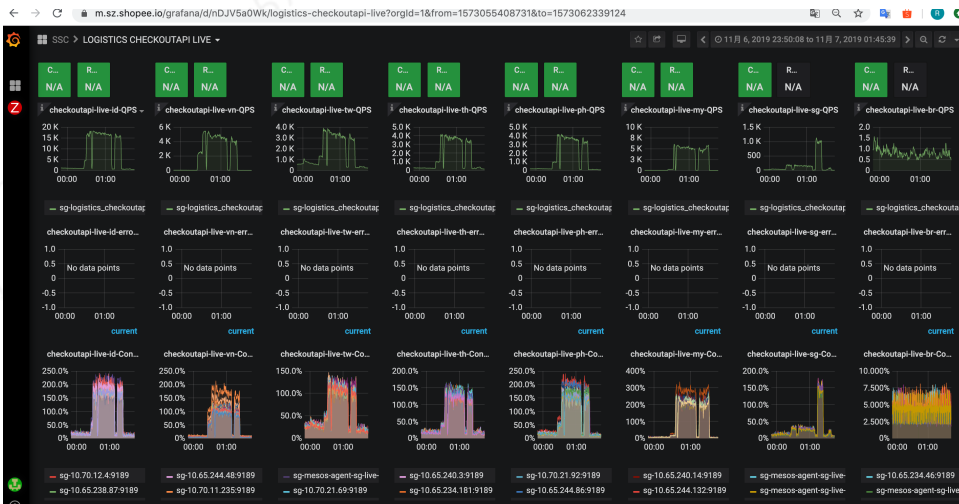
2. 混合场景压测（多接口多服务多国家一起压）

服务	国家	预期QPS	预计机器	容量是否满足	实际压测QPS (wrk)	QPS最高峰值 (grafana)	平均响应时间	90%响应时间	99%响应时间	CPU使用	总请求数	timeout笔数	timeout占比
goservice	ID	156300	80	是	196212.34	202500	43.63ms	107.24ms	374.89ms	37.48	67949570	8215	0.000120898484
	MY	16500	20	是	19499.33	33500	37.17ms	88.41ms	373.74ms	13.297	11701594	1388	0.0001186163184
	PH	14240	20	是	20859.34	29500	27.07ms	65.95ms	281.70ms	29.23	12517732	1177	0.0000940266176
	SG	2700	10	是	2318.14	3183	60.81ms	139.84ms	741.93ms	7.72	1391116	256	0.0001840249124
	TH	16300	20	是	36363.32	54700	28.75ms	70.28ms	286.49ms	30.87	21821777	524	0.00002401270987
	TW	29000	30	是	21293.69	65400	39.71ms	88.62ms	402.05ms	31.772	12778425	3023	0.0002365706259
	VN	31400	30	是	16870.71	28900	47.34ms	124.56ms	369.29ms	16.95	10124177	4780	0.0004721371426
checkoutservice	ID	4670	200	是	17699.78	18930	107.47ms	374.36ms	720.94ms	28.12	10621730	943	0.00008878026461
	MY	750	20	是	5904.29	5950	22.78ms	39.21ms	258.70ms	40.04	3543165	71	0.00002003858132
	PH	100	30	是	3776.46	3804	34.98ms	46.45ms	446.91ms	29.1	2266245	95	0.00004191956298
	SG	670	10	是	1160.85	1227	35.32ms	54.40ms	394.17ms	22.4	696615	16	0.00002296821056
	TH	795	40	是	3705	3820	36.25ms	55.94ms	452.05ms	20.25	2223384	61	0.00002743565664
	TW	1070	40	是	3119.05	3393	36.73ms	56.77ms	451.05ms	17.25	1871739	63	0.00003365853893
	VN	8055	40	是	4674.79	4693	25.56ms	48.10ms	293.39ms	22.125	2805341	167	0.00005952930499
logistics(webapi) service	ID	1418	80	是	11754.63	13370	238.15ms	763.78ms	1.31s	45	7053956	1542	0.0002186007398
	MY	667	20	是	897.46	1500	98.58ms	219.07ms	749.09ms	32	538565	14	0.00002599500525
	PH	317	20	是	1021.41	1440	94.61ms	200.12ms	844.10ms	25	612948	58	0.00009462466637
	SG	100	20	是	620.68	887	87.99ms	183.80ms	577.68ms	15.125	372469	54	0.0001449785083
	TH	1000	30	是	2208.79	2983	98.63ms	214.71ms	808.61ms	43	1325493	50	0.00003772181369
	TW	600	30	是	1551.45	2389	112.40ms	233.77ms	892.50ms	32	931023	96	0.0001031123828
	VN	1000	30	是	2026.65	2641	71.19ms	165.37ms	547.03ms	18.25	1216195	24	0.00001973367758
sls tsf service	ID	10668	20	是	22126.42	25540	15.44ms	33.87ms	180.91ms	23.697	13278012	25	0.000001882811975
	MY	7001	10	是	12812.42	14850	19.33ms	34.62ms	329.13ms	18.47	7688739	10	0.000001300603389
	PH	4001	10	是	10218.69	22320	14.69ms	25.61ms	187.66ms	31.885	6132135	19	0.00000309843146
	SG	1934	10	是	10262.53	11460	12.17ms	26.51ms	138.36ms	8.56	6158401	10	0.000001623798126
	TH	3540	10	是	16687.94	18400	14.08ms	23.24ms	200.99ms	18.27	10014383	27	0.000002696122167
	TW	3340	10	是	7165.6	9170	19.35ms	58.88ms	165.16ms	16.25	4300032	9	0.00000209300768
	VN	5640	10	是	17081.91	21800	25.74ms	63.55ms	345.77ms	21.36	10250868	30	0.000002926581437

goservice

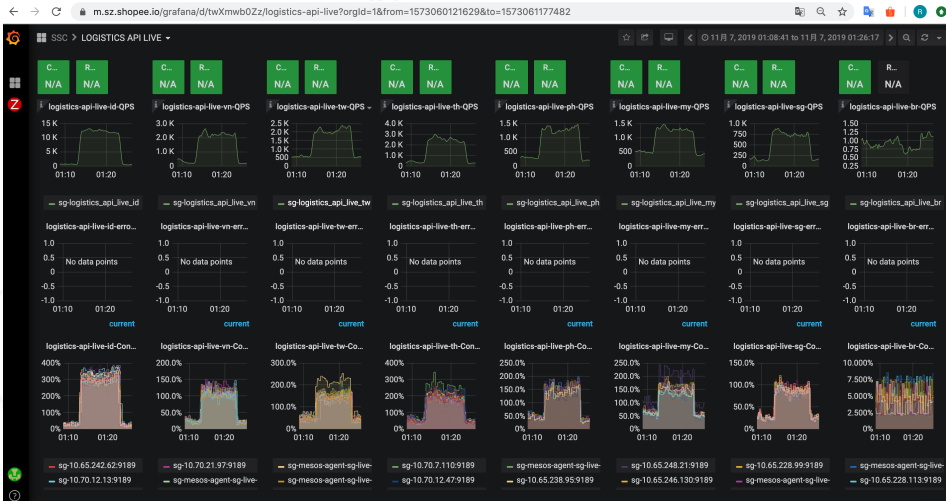


checkoutservice



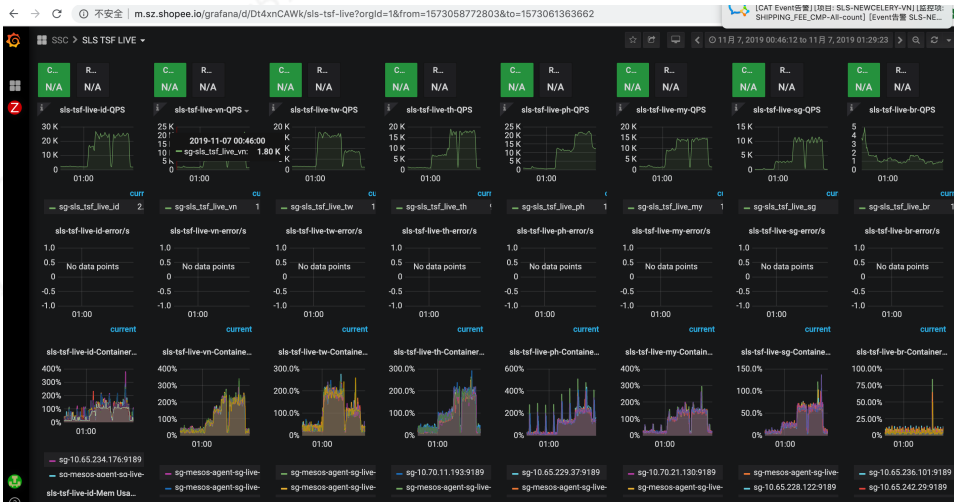
logistics(webapi)service

<https://m.sz.shopee.io/grafana/d/twXmwb0Zz/logistics-api-live?orgId=1&from=1573060121629&to=1573061177482>



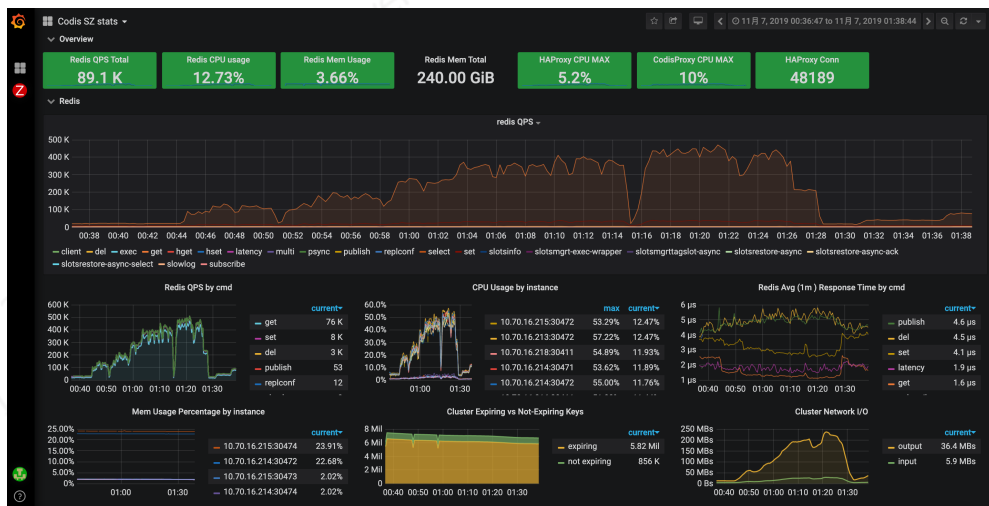
sls tsf service

<https://m.sz.shopee.io/grafana/d/nDJV5a0Wk/logistics-checkoutapi-live?orgId=1&from=1573052258552&to=1573064859267>



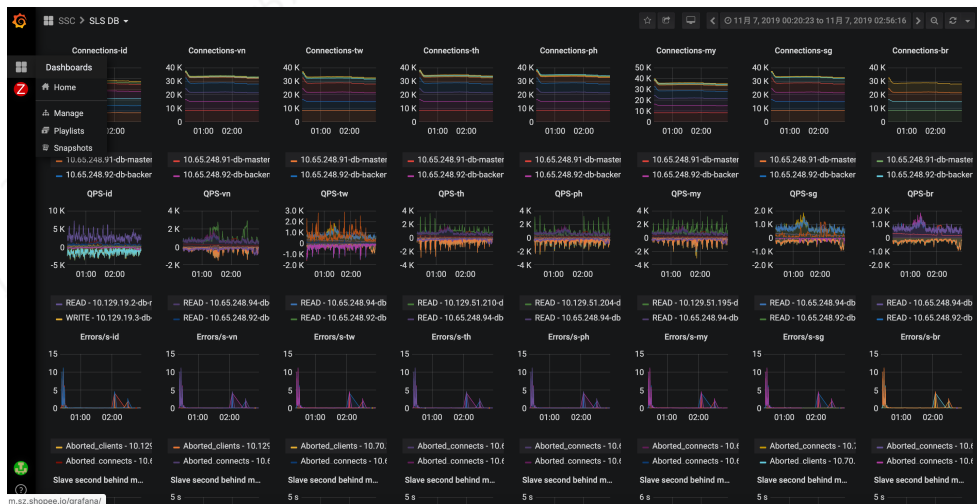
codis:

https://m.sz.shopee.io/grafana/d/u1AcTtqmk/codis-sz-stats?orgId=1&from=1573058207498&to=1573061924629&var-group=ssc&var-project=sls&var-alias=codis_ssc_sls_api_live_id&var-interval=30d&var-datasource=Prometheus-cache



sls-db:

<http://m.sz.shopee.io/grafana/d/1WuZ071Wk/sls-db?orgId=1&from=1573057223371&to=1573066576942>



3. 分析原因。

1. 热点key的问题（在压测的时候没有复现）

原因：-1. 采样数据比较少（重复压） 2. 没有业务行为的业务数据（采样）支持

解决措施：1. 统一对codis的key上加下lru,来分散热点

2. spex重试次数的问题（在压测的时候没有复现）

原因：-- 1.没有对外部依赖系统或基础组件做导致模拟

解决措施：1. 梳理对外部访问的都加上有重试次数的控制（短期）