**第三方医院接口调用分析报告**

**V1.0 2018/02/09**

**本报告面向针对第三方医院的底层接口，分析医院接口对于我方通用统一接口的实现方式，并给出实现效率报表，以供开发维护人员进行熟悉、优化。**

\*当前分析报告主要包含

* **底层医院基础接口调用效率测试报告**
* **基于医院基础接口组织统一接口实现方式**
* **基于医院基础接口组织统一接口测试报告**

当前分析报告针对医院有：

上海： {

Dingyuan.liu:[ 儿中心,华山医院, 岳阳医院]

Gangnan.chen:[肿瘤医院,仁济西院, 九院]

Chen.chen:[静中心,中日医院]

}

**一．底层医院基础接口调用效率测试报告**

1, 儿中心:

上海市儿童医学中心提供webservice服务供导医通平台进行调用（无前置机，可本地remote）。

查询接口：

1.1预约资源--医生排班:  [http://192.168.220.96:5555/demo/swagger-ui.html#!/er45tong45controller/fuGaoGetPreResourcesUsingGET](%20http://192.168.220.96:5555/demo/swagger-ui.html#!/er45tong45controller/fuGaoGetPreResourcesUsingGET )

\*当前接口 提供所有科室下医生在某个时间段内的号源查询

1.1.1,全院所有号源查询测试报告：全院所有号源查询无并发能力，单次调用7s-25s

命令行参数参考： -c 1 -n 5 -h Content-Type:application/x-www-form-urlencoded   
  
Time Total:21.143209 sec  
Time Fastest:1.142065 sec  
Time Slowest:1.142065 sec  
  
Success Num:1  
Fail Num:4  
Response Size:133 bytes  
Requests per second:0.047297 [#/sec]  
  
  
temporal distribution:[percent %] [time min sec]~[time max sec]

测试结果：该接口全量查询不可作为我方通用接口查询 的下级支持接口 。

1.1.2,全科室所有号源查询测试报告：

以心血管专科门诊为测试用例，科室code为14，单次调用 400ms-2s

并发能力：

命令行参数参考： -c 5 -n 5 -h Content-Type:application/x-www-form-urlencoded   
  
Time Total:0.789045 sec  
Time Fastest:0.332019 sec  
Time Slowest:0.784045 sec  
  
Success Num:5  
Fail Num:0  
Response Size:865353 bytes  
Requests per second:6.336773 [#/sec]  
  
  
temporal distribution:[percent %] [time min sec]~[time max sec]

命令行参数参考： -c 5 -n 10 -h Content-Type:application/x-www-form-urlencoded   
  
Time Total:3.354192 sec  
Time Fastest:0.314018 sec  
Time Slowest:2.581148 sec  
  
Success Num:10  
Fail Num:0  
Response Size:1946878 bytes  
Requests per second:2.981344 [#/sec]  
  
  
temporal distribution:[percent %] [time min sec]~[time max sec]   
10% 0.314018~0.314018   
20% 0.763044~0.763044   
30% 0.817047~0.817047   
40% 0.852049~0.852049   
50% 0.900052~0.900052   
60% 1.017058~1.017058   
70% 1.066061~1.066061   
80% 1.362078~1.362078   
90% 1.672096~1.672096   
100% 2.581148~2.581148

命令行参数参考： -c 10 -n 20 -h Content-Type:application/x-www-form-urlencoded   
  
Time Total:2.434139 sec  
Time Fastest:0.331019 sec  
Time Slowest:1.562089 sec  
  
Success Num:20  
Fail Num:0  
Response Size:3029068 bytes  
Requests per second:8.216457 [#/sec]  
  
  
temporal distribution:[percent %] [time min sec]~[time max sec]   
10% 0.331019~0.380022   
20% 0.392022~0.394022   
30% 0.500029~0.586034   
40% 0.633036~0.642037   
50% 0.670038~0.856049   
60% 0.859049~0.873050   
70% 0.873050~0.885051   
80% 0.974056~0.977056   
90% 1.171067~1.484085   
100% 1.536088~1.562089

命令行参数参考： -c 25 -n 50 -h Content-Type:application/x-www-form-urlencoded   
  
Time Total:5.981342 sec  
Time Fastest:0.331019 sec  
Time Slowest:2.835162 sec  
  
Success Num:48  
Fail Num:2  
Response Size:8869436 bytes  
Requests per second:8.024955 [#/sec]  
  
  
temporal distribution:[percent %] [time min sec]~[time max sec]   
10% 0.331019~0.392022   
20% 0.633036~0.730042   
30% 0.735042~0.972056   
40% 1.016058~1.112064   
50% 1.124064~1.298074   
60% 1.356078~1.441082   
70% 1.592091~1.764101   
80% 1.815104~1.933111   
90% 1.964112~2.364135   
100% 2.434139~2.835162

命令行参数参考： -c 25 -n 100 -h Content-Type:application/x-www-form-urlencoded   
  
Time Total:9.670553 sec  
Time Fastest:0.279016 sec  
Time Slowest:3.763215 sec  
  
Success Num:96  
Fail Num:4  
Response Size:16225668 bytes  
Requests per second:9.927043 [#/sec]  
  
  
temporal distribution:[percent %] [time min sec]~[time max sec]   
10% 0.279016~0.464027   
20% 0.472027~0.646037   
30% 0.669038~0.868050   
40% 0.921053~1.207069   
50% 1.213069~1.289074   
60% 1.302075~1.457083   
70% 1.485085~1.628093   
80% 1.655095~1.789102   
90% 1.802103~2.284131   
100% 2.580148~3.763215

心血管门诊全量号源查询接口测试结果：在保证秒级50次 并发数25的调用下，可以保证成功数，此接口可提供管理端进行查询调用，不可提供app，H5端的直接实时调用。

1.1.3,全科室时间段内（以14天为例）号源查询测试报告：

命令行参数参考： -c 25 -n 100 -h Content-Type:application/x-www-form-urlencoded   
  
Time Total:2.184125 sec  
Time Fastest:0.193011 sec  
Time Slowest:1.087062 sec  
  
Success Num:100  
Fail Num:0  
Response Size:2238391 bytes  
Requests per second:45.784927 [#/sec]  
  
  
temporal distribution:[percent %] [time min sec]~[time max sec]   
10% 0.193011~0.226013   
20% 0.228013~0.246014   
30% 0.247014~0.267015   
40% 0.268015~0.281016   
50% 0.283016~0.316018   
60% 0.320018~0.336019   
70% 0.340020~0.385022   
80% 0.388022~0.473027   
90% 0.489028~0.590034   
100% 0.591034~1.087062

命令行参数参考： -c 10 -n 100 -h Content-Type:application/x-www-form-urlencoded   
  
Time Total:42.930455 sec  
Time Fastest:0.845048 sec  
Time Slowest:4.944283 sec  
  
Success Num:39  
Fail Num:61  
Response Size:732833 bytes  
Requests per second:0.908446 [#/sec]  
  
  
temporal distribution:[percent %] [time min sec]~[time max sec]   
10% 0.845048~0.983056   
20% 1.012058~1.129064   
30% 1.192068~1.267073   
40% 1.470084~1.723099   
50% 1.739100~1.789102   
60% 1.827104~1.949112   
70% 2.087119~2.728156   
80% 2.811161~3.637208   
90% 3.818218~4.650266   
100% 4.669267~4.944283

在压测之后发现该接口针对 调用方做了 降级处理，故科室时间段内查询号源也不可提供app,H5端直接调用

1.1.3,全科室时间段内（以14天为例）固定医生（以陈树宝医生为例）号源查询测试报告：

命令行参数参考： -c 10 -n 100 -h Content-Type:application/x-www-form-urlencoded   
  
Time Total:12.222699 sec  
Time Fastest:0.187011 sec  
Time Slowest:3.357192 sec  
  
Success Num:96  
Fail Num:4  
Response Size:58289 bytes  
Requests per second:7.854239 [#/sec]  
  
  
temporal distribution:[percent %] [time min sec]~[time max sec]   
10% 0.187011~0.235014   
20% 0.237014~0.251014   
30% 0.254015~0.286016   
40% 0.291017~0.308018   
50% 0.309018~0.325019   
60% 0.328019~0.347020   
70% 0.347020~0.366021   
80% 0.366021~0.411024   
90% 0.415024~1.355078   
100% 1.564089~3.357192

院方给到的降级处理依然没有解除，故并发能力依然不强，该医生单次调用时间在200ms左右，可以提供app，H5直接调用