# APM api

**概述**

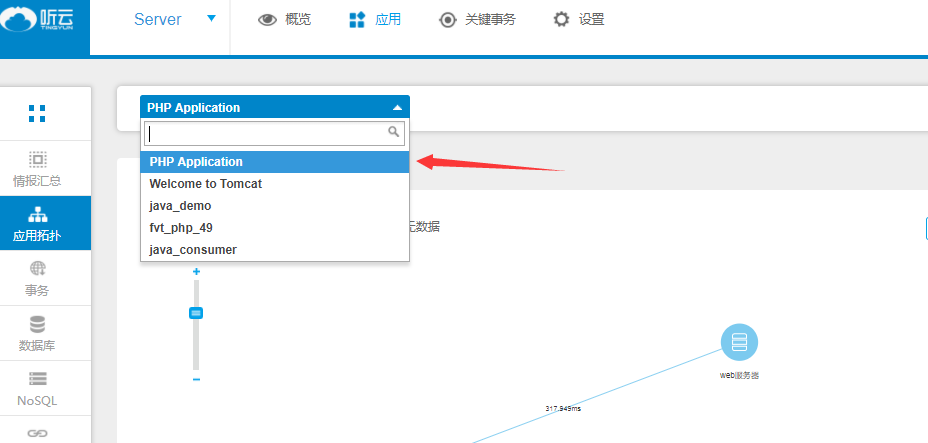
APM web 工程给前端返回json数据。其规范示例如下：

|  |
| --- |
| {  "errMsg": null, //1  "responeCode": "ok", //2  "objectList": [{ //3  "application": {  "applicationName": "appname1",  "serviceType": "TOMCAT",  "code": 11  },  "instanceCount": 22,  "apdex": "0.123",  "errPercentage": "55",  "rpm": "3.2",  "responseTime": 325  }, {  "application": {  "applicationName": "appname2",  "serviceType": "TOMCAT",  "code": 11  },  "instanceCount": 22,  "apdex": "0.123",  "errPercentage": "55",  "rpm": "3.2",  "responseTime": 325  }, {  "application": {  "applicationName": "appname3",  "serviceType": "UNDERTOW",  "code": 33  },  "instanceCount": 22,  "apdex": "0.123",  "errPercentage": "55",  "rpm": "3.2",  "responseTime": 325  }, {  "application": {  "applicationName": "appname4",  "serviceType": "JETTY",  "code": 44  },  "instanceCount": 22,  "apdex": "0.123",  "errPercentage": "55",  "rpm": "3.2",  "responseTime": 325  }],  "objectMaps": null,  "obj": null, //4  "success": true //5  } |

1. errMsg :apm web 工程后台错误的堆栈信息。
2. responeCode：返回的状态码为，简单结果，比如Unauthorized、 ok、
3. objectList： 该参数类似obj， 返回数据，返回的要展示的json 数，同下面的obj 二选一。
4. success： 调用成功与否，值为true、false, 如果是true,则说明该次调用正常，可以展示数据或做其他工作，如果是false ,说明apm web 后台报错了，这时可以打印出上述的responeCode 、errMsg 信息

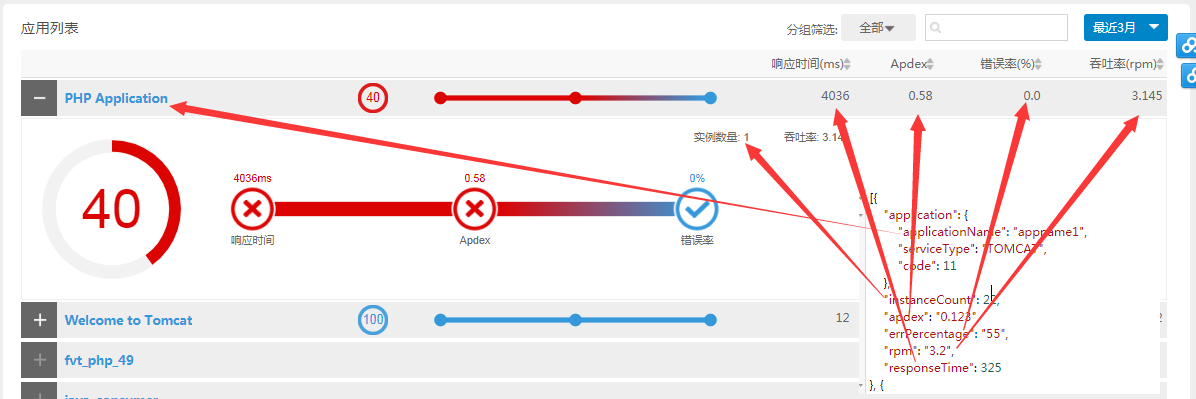
备注，objectMaps 后期扩展用，暂时不用考虑。

## 获取应用列表



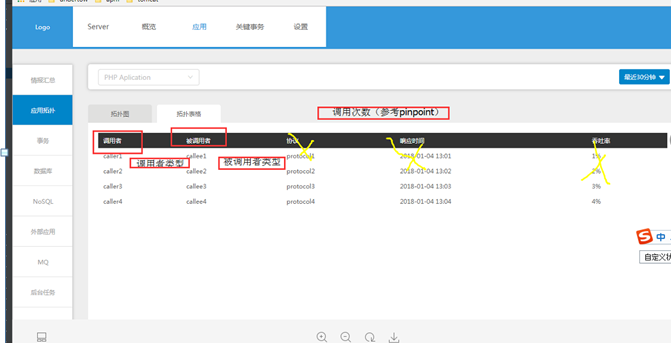
|  |  |
| --- | --- |
| http://localhost:8082/apm/apmApplications.pinpoint | |
| applicationName | 应用名称 |
| id | 应用id |

## 获取应用列表及其他信息



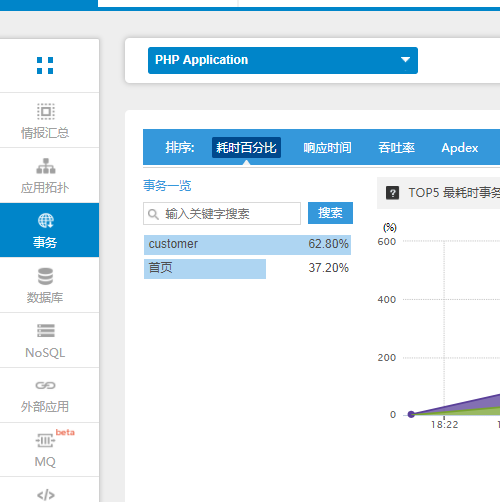
|  |  |
| --- | --- |
| http://localhost:8082/apm/apmApplicationInfo.pinpoint | |
| applicationName | 应用名称 |
| instanceCount | 实例数量 |
| responseTime | 响应时间 |
| Apdex | Apdex |
| errPercentage | 错误率 |
| id | 备注：事务一览的参数 |
| rpm | 吞吐率 |

## 应用拓扑列表信息



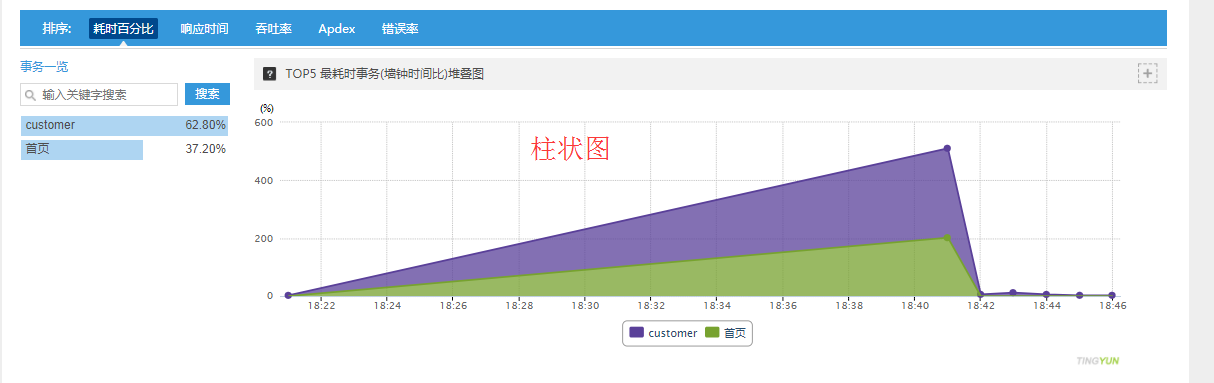
|  |
| --- |
|  |
| <http://localhost:8082/apm/topologyInfo.pinpoint>? appId= 应用列表中选中的应用id |
| {  "errMsg": null,  "responeCode": "ok",  "objectList": [  {  "callerMap": {  "callerId": null,  "timestamp": null,  "callerCode": null,  "callerDesc": null,  "calleeCode": null,  "calleeDesc": null,  "isError": null,  "callerAppId": null,  "calleeAppId": 22  },  "callTimes": 2,//次数  "apperName": "appname1",//调用者name  "apperType": "TOMCAT", //调用者type  "appeeName": "mysqlname",//被。。。  "appeeType": "MYSQL"//被。。。。。  },  {  "callerMap": {  "callerId": null,  "timestamp": null,  "callerCode": null,  "callerDesc": null,  "calleeCode": null,  "calleeDesc": null,  "isError": null,  "callerAppId": null,  "calleeAppId": 33  },  "callTimes": 1,  "apperName": "appname1",  "apperType": "TOMCAT",  "appeeName": "redisname",  "appeeType": "REDIS"  }  ],  "objectMaps": null,  "obj": null,  "success": true  } |

## 事务一览



|  |
| --- |
| <http://localhost:8082/apm/transactionList.pinpoint?appId>= 获取应用列表或其它信息中的id |
| {  "errMsg": null,  "responeCode": "ok",  "objectList": [  {  "transaction": {  "id": null,  "rpc": "/aa/bb", //事务名称  "startTime": null,  "endTime": null,  "elapsed": null,  "appllicationId": "11"  },  "transactionPer": 0.6667 //百分比  },  {  "transaction": {  "id": null,  "rpc": "/ee/ff",  "startTime": null,  "endTime": null,  "elapsed": null,  "appllicationId": "11"  },  "transactionPer": 0.3333  }  ],  "objectMaps": null,  "obj": null,  "success": true  } |

## Top N 事务列表



横轴为事务名称，纵轴为时间。

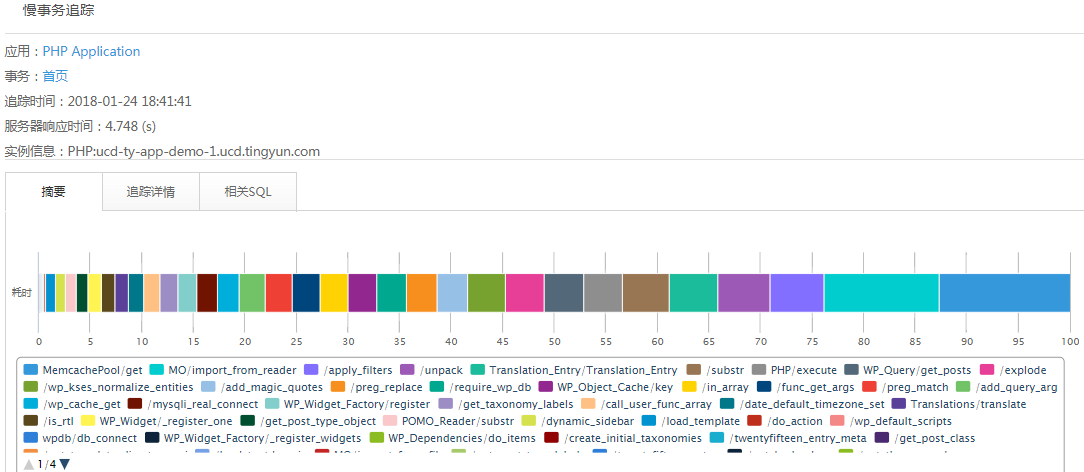
|  |
| --- |
| <http://localhost:8082/apm/expensiveTranList.pinpoint？topNum=5>（要查询几个）& appId=应用id |
| {  "errMsg": null,  "responeCode": "ok",  "objectList": [{  "transaction": {  "id": null,  "rpc": "/aa/bb",  "startTime": null,  "endTime": null,  "elapsed": null,  "appllicationId": "11"  },  "transactionPer": 0.67,  "maxTransactionTime": 1000,  "minTransactionTime": 200,  "avgTransactionTime": "733.3333",  "transactionCount": 3  }, {  "transaction": {  "id": null,  "rpc": "/ee/ff",  "startTime": null,  "endTime": null,  "elapsed": null,  "appllicationId": "11"  },  "transactionPer": 0.33,  "maxTransactionTime": 1100,  "minTransactionTime": 1100,  "avgTransactionTime": "1100.0000",  "transactionCount": 1  }],  "objectMaps": null,  "obj": null,  "success": true  } |

## 慢事务列表



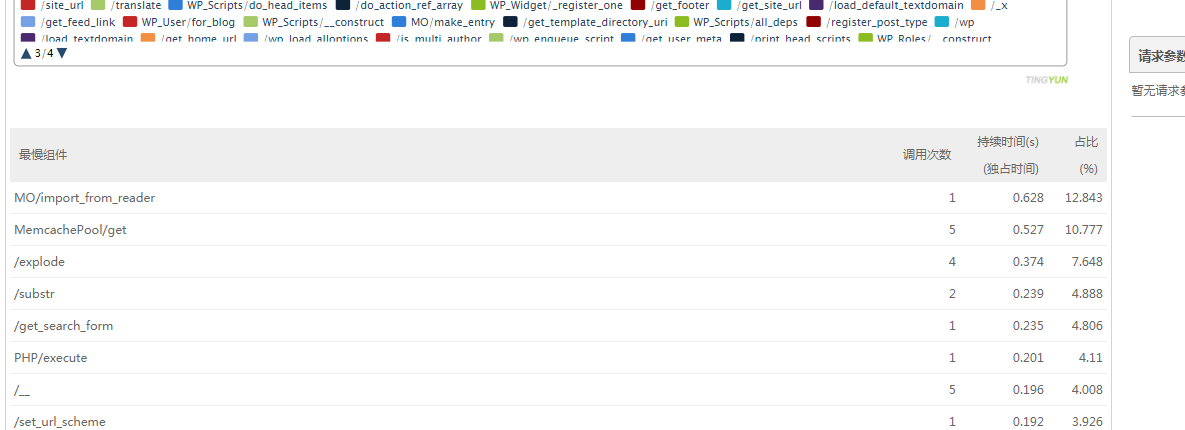
|  |
| --- |
| [http://localhost:8082/apm/ slowTransaction.pinpoint?appId](http://localhost:8082/apm/slowTransactionList.pinpoint?appId) =应用id |
| {  "errMsg": null,  "responeCode": "ok",  "objectList": [  {  "startTime": "1516959606000",  "rpc": "/hcbtra",  "applicationId": "11",  "elapsed": 1935,  "transactionId": "2"  },  {  "startTime": "1516959606000",  "rpc": "/hcbtra",  "applicationId": "11",  "elapsed": 122,  "transactionId": "1"  },  {  "startTime": "1516959606000",  "rpc": "/hcbtra111",  "applicationId": "11",  "elapsed": 2,  "transactionId": "2"  },  {  "startTime": "1516959606000",  "rpc": "/hcbtra111",  "applicationId": "11",  "elapsed": 1,  "transactionId": "1"  },  {  "startTime": "1516959606000",  "rpc": "/hcbtra111",  "applicationId": "11",  "elapsed": 1,  "transactionId": "2"  }  ],  "objectMaps": null,  "obj": null,  "success": true  } |

## 事务追踪



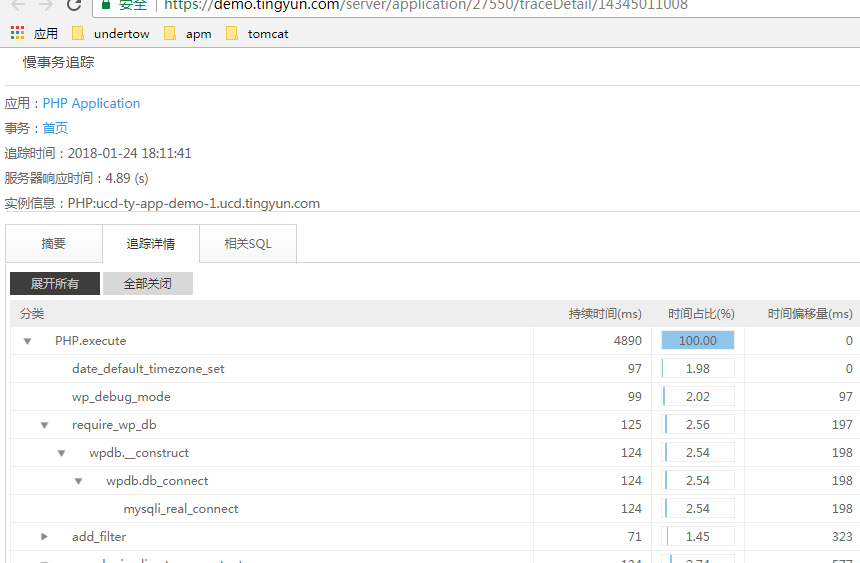
|  |
| --- |
| <http://localhost:8082/apm/tranInvokeTrace.pinpoint>？appId=11&transactionId=22 |
| {  "errMsg": null,  "responeCode": "ok",  "objectList": [  {  "spanEventId": "1",  "endElapsed": 1,  "methodId": "1",  "apiInfo": "org.apache.catalina.connector.Request.startAsync(javax.servlet.ServletRequest request, javax.servlet.ServletResponse response)"  },  {  "spanEventId": "2",  "endElapsed": 2222,  "methodId": "2",  "apiInfo": "Tomcat Servlet Asynchronous Process"  },  {  "spanEventId": "3",  "endElapsed": 3333,  "methodId": "3",  "apiInfo": "com.mysql.jdbc.NonRegisteringDriver.connect(java.lang.String url, java.util.Properties info)"  },  {  "spanEventId": "4",  "endElapsed": 2222,  "methodId": "4",  "apiInfo": "com.mysql.jdbc.ConnectionImpl.prepareStatement(java.lang.String sql, int autoGenKeyIndex)"  },  {  "spanEventId": "5",  "endElapsed": 22222,  "methodId": "5",  "apiInfo": "com.mysql.jdbc.ConnectionImpl.prepareStatement(java.lang.String sql, java.lang.String[] autoGenKeyColNames)"  },  {  "spanEventId": "6",  "endElapsed": 122222,  "methodId": "6",  "apiInfo": "com.mysql.jdbc.ConnectionImpl.prepareStatement(java.lang.String sql, int resultSetType, int resultSetConcurrency, int resultSetHoldability)"  },  {  "spanEventId": "7",  "endElapsed": 2222,  "methodId": "7",  "apiInfo": "com.mysql.jdbc.ConnectionImpl.prepareCall(java.lang.String sql, int resultSetType, int resultSetConcurrency)"  },  {  "spanEventId": "8",  "endElapsed": 3333,  "methodId": "8",  "apiInfo": "com.mysql.jdbc.ConnectionImpl.setAutoCommit(boolean autoCommitFlag)"  },  {  "spanEventId": "9",  "endElapsed": 44,  "methodId": "8",  "apiInfo": "com.mysql.jdbc.ConnectionImpl.setAutoCommit(boolean autoCommitFlag)"  }  ],  "objectMaps": null,  "obj": null,  "success": true  } |

## 慢组件列表



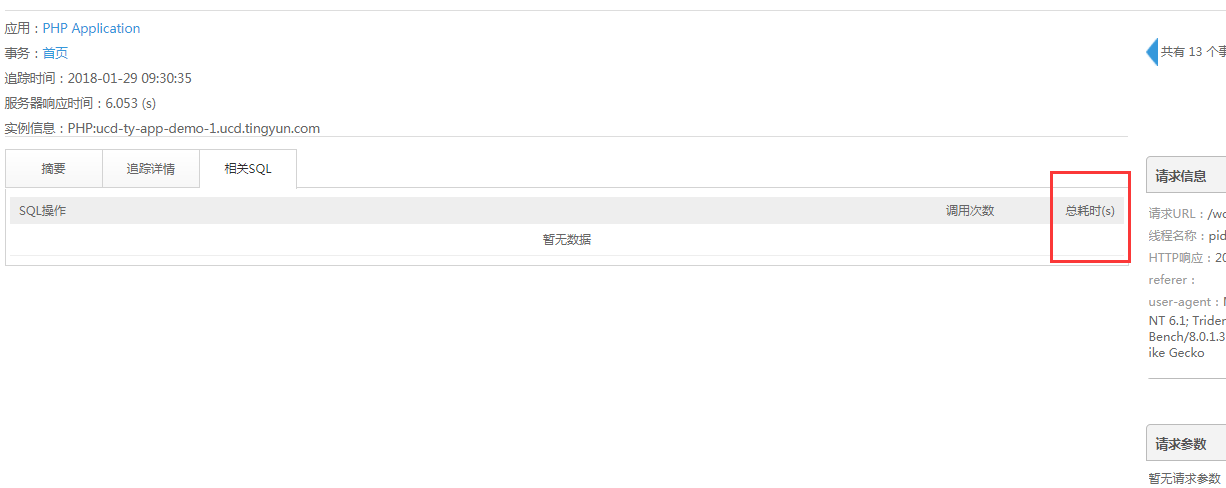
|  |
| --- |
| http://localhost:8082/apm/slowestComponentList.pinpoint?transactionId=事务id&appId=应用id |
| {  "errMsg": null,  "responeCode": "ok",  "objectList": null,  "objectMaps": null,  "obj": {  "startTime": 0,  "elapsed": 122,  "spanEventList": [  {  "spanEventId": 1,  "endElapsed": 1,  "afterSpanEvent": {  "spanEventId": 2,  "totalTime": 0,  "timePercent": 0.0  },  "childSpanEventList": [    ],  "totalTime": 0,  "timePercent": 0.0082,  "apiInfo": "org.apache.catalina.connector.Request.startAsync(javax.servlet.ServletRequest request, javax.servlet.ServletResponse response)",  "simpleApiInfo": "null:o.a.c.c.R.startAsync"  },  {  "spanEventId": 2,  "endElapsed": 2222,  "beforeSpanEvent": {  "spanEventId": 1,  "totalTime": 0,  "timePercent": 0.0  },  "afterSpanEvent": {  "spanEventId": 8,  "totalTime": 0,  "timePercent": 0.0  },  "childSpanEventList": [  {  "spanEventId": 3,  "endElapsed": 3333,  "parentSpanEvent": {  "spanEventId": 2,  "totalTime": 0,  "timePercent": 0.0  },  "afterSpanEvent": {  "spanEventId": 6,  "totalTime": 0,  "timePercent": 0.0  },  "childSpanEventList": [  {  "spanEventId": 4,  "endElapsed": 2222,  "parentSpanEvent": {  "spanEventId": 3,  "totalTime": 0,  "timePercent": 0.0  },  "afterSpanEvent": {  "spanEventId": 5,  "totalTime": 0,  "timePercent": 0.0  },  "childSpanEventList": [    ],  "totalTime": 0,  "timePercent": 18.2131,  "apiInfo": "com.mysql.jdbc.ConnectionImpl.prepareStatement(java.lang.String sql, int autoGenKeyIndex)",  "simpleApiInfo": "null:c.m.j.C.prepareStatement"  },  {  "spanEventId": 5,  "endElapsed": 22222,  "parentSpanEvent": {  "spanEventId": 3,  "totalTime": 0,  "timePercent": 0.0  },  "beforeSpanEvent": {  "spanEventId": 4,  "totalTime": 0,  "timePercent": 0.0  },  "childSpanEventList": [    ],  "totalTime": 0,  "timePercent": 182.1475,  "apiInfo": "com.mysql.jdbc.ConnectionImpl.prepareStatement(java.lang.String sql, java.lang.String[] autoGenKeyColNames)",  "simpleApiInfo": "null:c.m.j.C.prepareStatement"  }  ],  "totalTime": 0,  "timePercent": 27.3197,  "apiInfo": "com.mysql.jdbc.NonRegisteringDriver.connect(java.lang.String url, java.util.Properties info)",  "simpleApiInfo": "null:c.m.j.N.connect"  },  {  "spanEventId": 6,  "endElapsed": 2222,  "parentSpanEvent": {  "spanEventId": 2,  "totalTime": 0,  "timePercent": 0.0  },  "beforeSpanEvent": {  "spanEventId": 3,  "totalTime": 0,  "timePercent": 0.0  },  "afterSpanEvent": {  "spanEventId": 7,  "totalTime": 0,  "timePercent": 0.0  },  "childSpanEventList": [    ],  "totalTime": 0,  "timePercent": 18.2131,  "apiInfo": "com.mysql.jdbc.ConnectionImpl.prepareStatement(java.lang.String sql, int resultSetType, int resultSetConcurrency, int resultSetHoldability)",  "simpleApiInfo": "null:c.m.j.C.prepareStatement"  },  {  "spanEventId": 7,  "endElapsed": 2222,  "parentSpanEvent": {  "spanEventId": 2,  "totalTime": 0,  "timePercent": 0.0  },  "beforeSpanEvent": {  "spanEventId": 6,  "totalTime": 0,  "timePercent": 0.0  },  "childSpanEventList": [    ],  "totalTime": 0,  "timePercent": 18.2131,  "apiInfo": "com.mysql.jdbc.ConnectionImpl.prepareCall(java.lang.String sql, int resultSetType, int resultSetConcurrency)",  "simpleApiInfo": "null:c.m.j.C.prepareCall"  }  ],  "totalTime": 0,  "timePercent": 18.2131,  "apiInfo": "Tomcat Servlet Asynchronous Process",  "simpleApiInfo": "null:Tomcat Servlet Asynchronous Pr..."  },  {  "spanEventId": 8,  "endElapsed": 3333,  "beforeSpanEvent": {  "spanEventId": 2,  "totalTime": 0,  "timePercent": 0.0  },  "afterSpanEvent": {  "spanEventId": 9,  "totalTime": 0,  "timePercent": 0.0  },  "childSpanEventList": [    ],  "totalTime": 0,  "timePercent": 27.3197,  "apiInfo": "com.mysql.jdbc.ConnectionImpl.setAutoCommit(boolean autoCommitFlag)",  "simpleApiInfo": "null:c.m.j.C.setAutoCommit"  },  {  "spanEventId": 9,  "endElapsed": 44,  "beforeSpanEvent": {  "spanEventId": 8,  "totalTime": 0,  "timePercent": 0.0  },  "childSpanEventList": [    ],  "totalTime": 0,  "timePercent": 0.3607,  "apiInfo": "com.mysql.jdbc.ConnectionImpl.setAutoCommit(boolean autoCommitFlag)",  "simpleApiInfo": "null:c.m.j.C.setAutoCommit"  }  ]  },  "success": true  } |

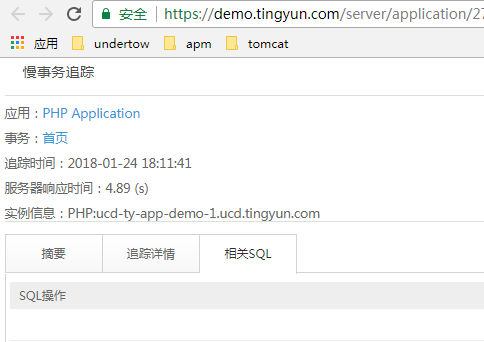
## 追踪详情



|  |
| --- |
| http://localhost:8082/apm/ tracedetail.pinpoint |
| {  "errMsg": null,  "responeCode": "ok",  "objectList": null,  "objectMaps": null,  "obj": {  "startTime": 0,  "elapsed": 122,  "spanEventList": [  {  "spanEventId": 1,  "transactionId": "1",  "spanId": 1,  "startElapsed": 11,  "endElapsed": 1,  "sequence": 1,  "depth": 1,  "serviceType": 1010,  "destinationId": "1",  "apiId": 1,  "sqlId": 0,  "afterSpanEvent": {  "spanEventId": 2,  "totalTime": 0,  "timePercent": 0.0  },  "childSpanEventList": [    ],  "totalTime": 0,  "timePercent": 0.0  },  {  "spanEventId": 2,  "transactionId": "1",  "spanId": 1,  "startElapsed": 22,  "endElapsed": 2222,  "sequence": 2,  "depth": -1,  "serviceType": 1010,  "rpc": "/aa/bb",  "endPoint": "127.0.0.1:8080",  "destinationId": "1",  "apiId": 2,  "nextSpanId": 3,  "exceptionId": 1,  "exceptionMessage": "11",  "nextAsyncId": 1,  "sqlId": 2,  "beforeSpanEvent": {  "spanEventId": 1,  "totalTime": 0,  "timePercent": 0.0  },  "afterSpanEvent": {  "spanEventId": 8,  "totalTime": 0,  "timePercent": 0.0  },  "childSpanEventList": [  {  "spanEventId": 3,  "transactionId": "1",  "spanId": 1,  "startElapsed": 33,  "endElapsed": 3333,  "sequence": 3,  "depth": 2,  "serviceType": 1010,  "endPoint": "127.0.0.1",  "destinationId": "1",  "apiId": 3,  "nextAsyncId": 1,  "sqlId": 0,  "parentSpanEvent": {  "spanEventId": 2,  "totalTime": 0,  "timePercent": 0.0  },  "afterSpanEvent": {  "spanEventId": 6,  "totalTime": 0,  "timePercent": 0.0  },  "childSpanEventList": [  {  "spanEventId": 4,  "transactionId": "1",  "spanId": 1,  "startElapsed": 44,  "endElapsed": 2222,  "sequence": 4,  "depth": 3,  "serviceType": 1010,  "endPoint": "127.0.0.1",  "destinationId": "1",  "apiId": 4,  "nextAsyncId": 1,  "sqlId": 0,  "parentSpanEvent": {  "spanEventId": 3,  "totalTime": 0,  "timePercent": 0.0  },  "afterSpanEvent": {  "spanEventId": 5,  "totalTime": 0,  "timePercent": 0.0  },  "childSpanEventList": [    ],  "totalTime": 0,  "timePercent": 0.0  },  {  "spanEventId": 5,  "transactionId": "1",  "spanId": 1,  "startElapsed": 55,  "endElapsed": 22222,  "sequence": 5,  "depth": -1,  "serviceType": 1010,  "rpc": "/11/bb",  "endPoint": "127.0.0.1",  "destinationId": "1",  "apiId": 5,  "nextAsyncId": 1,  "sqlId": 0,  "parentSpanEvent": {  "spanEventId": 3,  "totalTime": 0,  "timePercent": 0.0  },  "beforeSpanEvent": {  "spanEventId": 4,  "totalTime": 0,  "timePercent": 0.0  },  "childSpanEventList": [    ],  "totalTime": 0,  "timePercent": 0.0  }  ],  "totalTime": 0,  "timePercent": 0.0  },  {  "spanEventId": 6,  "transactionId": "1",  "spanId": 1,  "startElapsed": 66,  "endElapsed": 2222,  "sequence": 6,  "depth": -1,  "serviceType": 1010,  "endPoint": "127.0.0.1",  "destinationId": "1",  "apiId": 6,  "nextAsyncId": 1,  "sqlId": 1,  "parentSpanEvent": {  "spanEventId": 2,  "totalTime": 0,  "timePercent": 0.0  },  "beforeSpanEvent": {  "spanEventId": 3,  "totalTime": 0,  "timePercent": 0.0  },  "afterSpanEvent": {  "spanEventId": 7,  "totalTime": 0,  "timePercent": 0.0  },  "childSpanEventList": [    ],  "totalTime": 0,  "timePercent": 0.0  },  {  "spanEventId": 7,  "transactionId": "1",  "spanId": 1,  "startElapsed": 77,  "endElapsed": 2222,  "sequence": 7,  "depth": -1,  "serviceType": 2020,  "destinationId": "1",  "apiId": 7,  "nextAsyncId": 1,  "sqlId": 0,  "parentSpanEvent": {  "spanEventId": 2,  "totalTime": 0,  "timePercent": 0.0  },  "beforeSpanEvent": {  "spanEventId": 6,  "totalTime": 0,  "timePercent": 0.0  },  "childSpanEventList": [    ],  "totalTime": 0,  "timePercent": 0.0  }  ],  "totalTime": 0,  "timePercent": 0.0  },  {  "spanEventId": 8,  "transactionId": "1",  "spanId": 1,  "startElapsed": 88,  "endElapsed": 3333,  "sequence": 8,  "depth": -1,  "serviceType": 3030,  "endPoint": "127.0.0.1",  "destinationId": "2",  "apiId": 8,  "nextSpanId": 9,  "exceptionId": 1,  "nextAsyncId": 11,  "sqlId": 1,  "beforeSpanEvent": {  "spanEventId": 2,  "totalTime": 0,  "timePercent": 0.0  },  "afterSpanEvent": {  "spanEventId": 9,  "totalTime": 0,  "timePercent": 0.0  },  "childSpanEventList": [    ],  "totalTime": 0,  "timePercent": 0.0  },  {  "spanEventId": 9,  "transactionId": "1",  "spanId": 1,  "startElapsed": 99,  "endElapsed": 44,  "sequence": 9,  "depth": -1,  "serviceType": 1010,  "rpc": "/ff",  "endPoint": "127.0.0.1",  "destinationId": "1",  "apiId": 8,  "nextAsyncId": 1,  "sqlId": 1,  "beforeSpanEvent": {  "spanEventId": 8,  "totalTime": 0,  "timePercent": 0.0  },  "childSpanEventList": [    ],  "totalTime": 0,  "timePercent": 0.0  }  ]  },  "success": true  } |

## 相关SQL

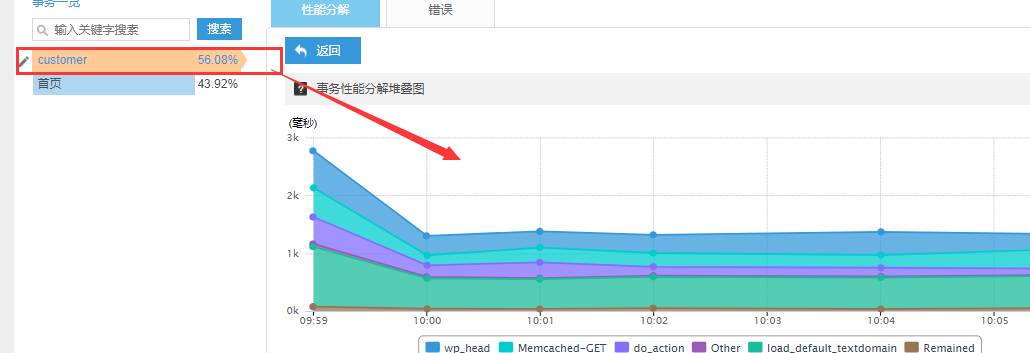




|  |
| --- |
| <http://localhost:8082/apm/sqlDetailByTranIdAndAppId.pinpoint？appId>=应用id& transactionId=事务id |
| {  "errMsg": null,  "responeCode": "ok",  "objectList": [  {  "sql": {  "sqlMetaDataId": 2,  "agentId": null,  "agentStartTime": null,  "sqlId": 1,  "sqlInfo": "select \* from person",  "time": null  },  "spanId": "1",  "sqlCount": 1,  "totalSqlTime": 2222  },  {  "sql": {  "sqlMetaDataId": 1,  "agentId": null,  "agentStartTime": null,  "sqlId": -1,  "sqlInfo": "update person set name=?",  "time": null  },  "spanId": "1",  "sqlCount": 3,  "totalSqlTime": 124488  }  ],  "objectMaps": null,  "obj": null,  "success": true  } |

## 某类事物详情

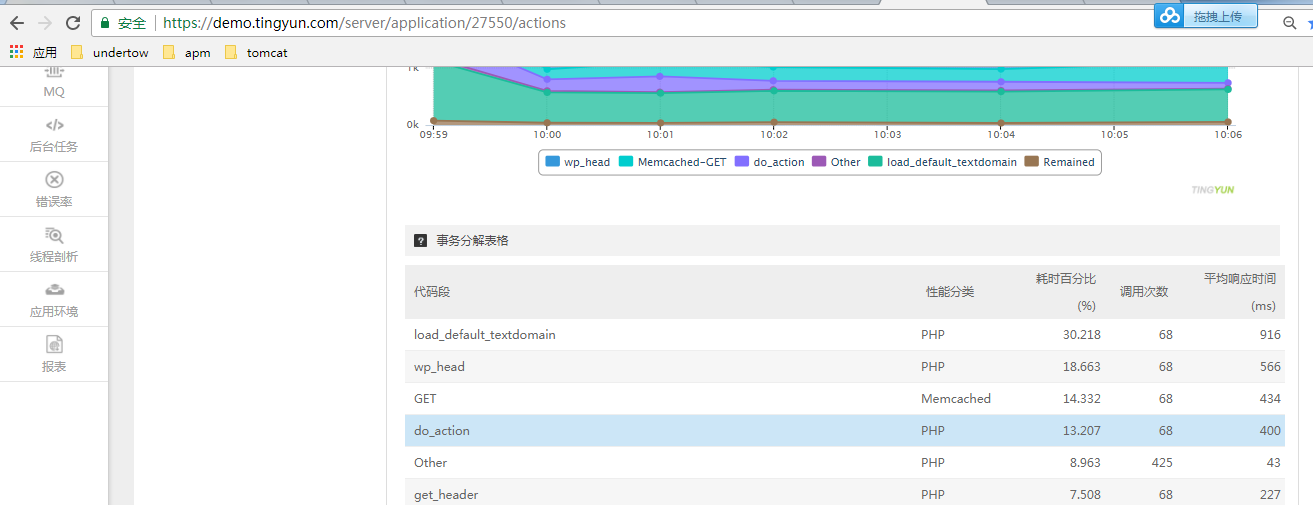
差application name



|  |
| --- |
| <http://localhost:8082/apm/eachSpanInTransaction.pinpoint？rpc>=事务rpc |
| {  "errMsg": null,  "responeCode": "ok",  "objectList": [  {  "averageTime": 122,  "maxTime": 122,  "minTime": 122,  "rpc": null,  "invokeCount": 1,  "theSpanPer": "0.6489",  "applicationId": "11"  },  {  "averageTime": 66,  "maxTime": 66,  "minTime": 66,  "rpc": null,  "invokeCount": 1,  "theSpanPer": "0.3511",  "applicationId": "12"  }  ],  "objectMaps": null,  "obj": null,  "success": true  } |

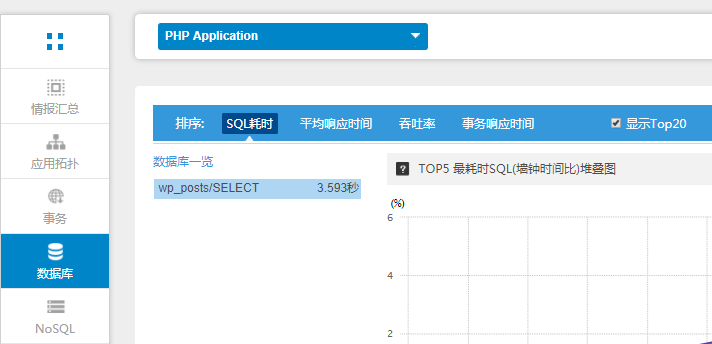
## 事务分解表格.

(本接口，年假优化，应该是查询某个app 下某个事务，即url,的多次调用，每次调用中各个方法的细分。)



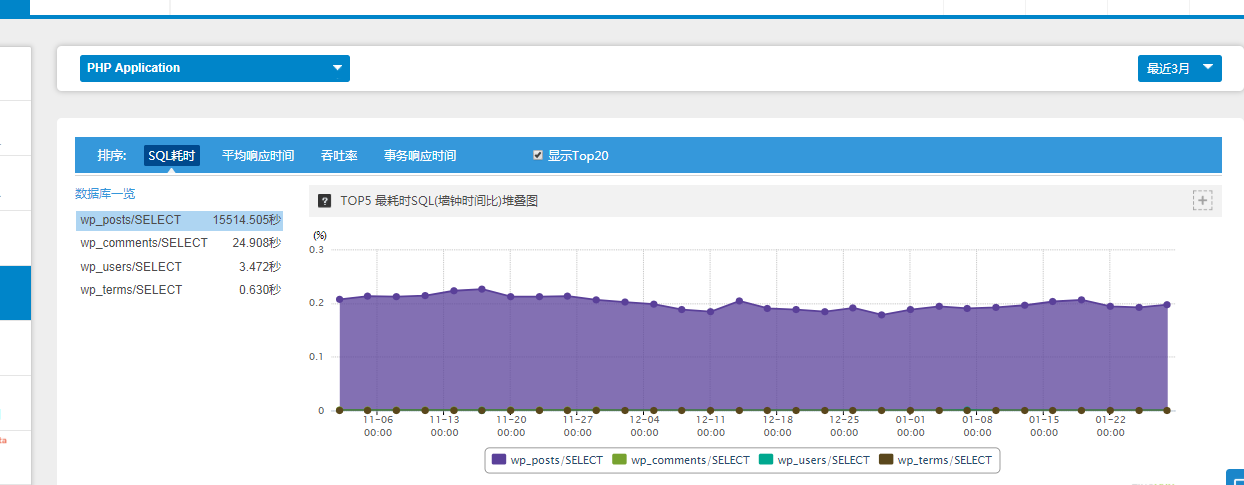
|  |
| --- |
| <http://localhost:8082/apm/theTransactionanalysis.pinpoint？rpc> = 事务中的rpc(事务一览) |
| {  "errMsg": null,  "responeCode": "ok",  "objectList": [  {  "rpc": "/hcbtra111",  "applicationName": "mysqlname",  "invokeCount": 4,  "avgTime": "17.5000",  "timePer": "0.0329"  },  {  "rpc": "/hcbtra",  "applicationName": "appname1",  "invokeCount": 2,  "avgTime": "1028.5000",  "timePer": "0.9671"  }  ],  "objectMaps": null,  "obj": null,  "success": true  } |

## 数据库-数据库一览



|  |
| --- |
| <http://localhost:8082/apm/dbOverview.pinpoint？appId> = 上述的appId |
| {  "errMsg": null,  "responeCode": "ok",  "objectList": [  {  "rpc": "/hcbtra",  "apiInfo": "com.mysql.jdbc.ConnectionImpl.prepareStatement(java.lang.String sql, int resultSetType, int resultSetConcurrency, int resultSetHoldability)",  "sqlInfo": "select \* from person",  "totalTime": "5599",  "simpleApiInfo": "/hcbtra :c.m.j.C.prepareStatement"  },  {  "rpc": "/hcbtra",  "apiInfo": "Tomcat Servlet Asynchronous Process",  "sqlInfo": "delete \* from person",  "totalTime": "2222",  "simpleApiInfo": "/hcbtra :Tomcat Servlet Asynchronous Pr..."  }  ],  "objectMaps": null,  "obj": null,  "success": true  } |

## TopN 慢Sql



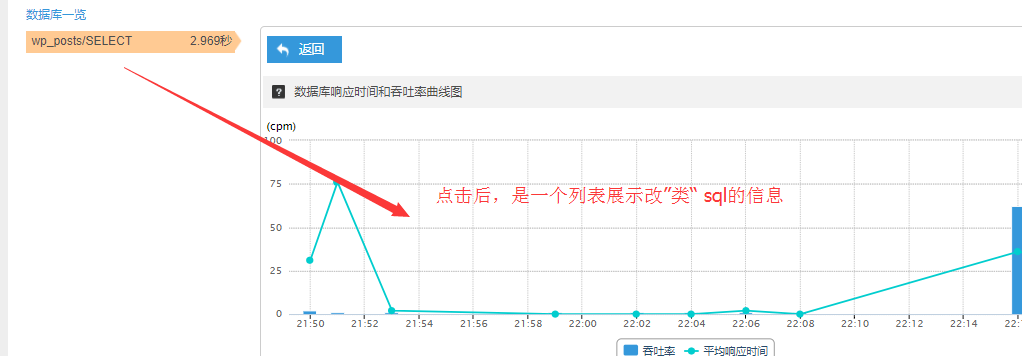
|  |
| --- |
| <http://localhost:8082/apm/topNExpensiveSql.pinpoint?appId>=应用Id |
| {  "errMsg": null,  "responeCode": "ok",  "objectList": [  {  "dataBaseSqlViewVO": {  "rpc": "/hcbtra",  "apiInfo": "Tomcat Servlet Asynchronous Process",  "sqlInfo": null,  "totalTime": "2222",  "simpleApiInfo": "/hcbtra :Tomcat Servlet Asynchronous Pr..."  },  "maxTime": 2222,  "minTime": "2222",  "invokeTime": 1,  "avgTime": 2222  },  {  "dataBaseSqlViewVO": {  "rpc": "/hcbtra",  "apiInfo": "com.mysql.jdbc.ConnectionImpl.prepareStatement(java.lang.String sql, int resultSetType, int resultSetConcurrency, int resultSetHoldability)",  "sqlInfo": null,  "totalTime": "5599",  "simpleApiInfo": "/hcbtra :c.m.j.C.prepareStatement"  },  "maxTime": 44,  "minTime": "3333",  "invokeTime": 3,  "avgTime": 1866  }  ],  "objectMaps": null,  "obj": null,  "success": |

## 慢sql追踪列表



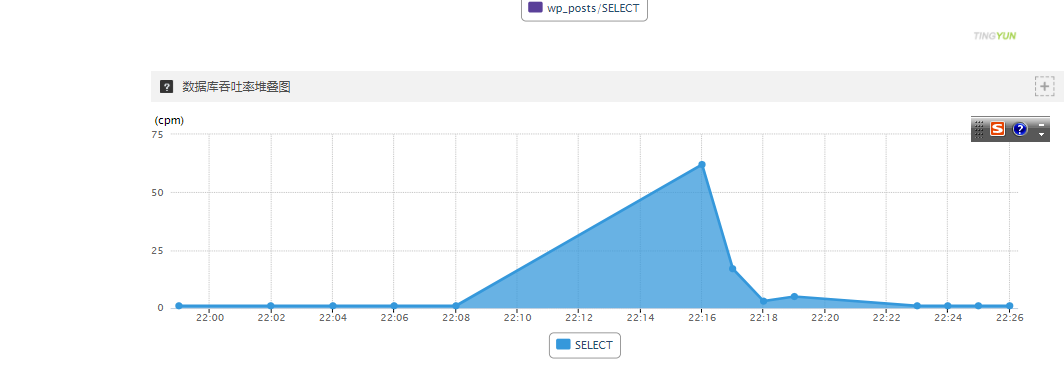
|  |
| --- |
| http://localhost:8082/apm/traceExpensiveSql.pinpoint? slowSqlThreshold & appId= |
| {  "errMsg": null,  "responeCode": "ok",  "objectList": [  {  "dataBaseSqlViewVO": {  "rpc": "/hcbtra",  "apiInfo": "Tomcat Servlet Asynchronous Process",  "sqlInfo": null,  "sqlId": 2,  "totalTime": "2222",  "simpleApiInfo": "/hcbtra :Tomcat Servlet Asynchronous Pr..."  },  "maxTime": 2222,  "minTime": "2222",  "invokeTime": 1,  "avgTime": 2222  },  {  "dataBaseSqlViewVO": {  "rpc": "/hcbtra",  "apiInfo": "com.mysql.jdbc.ConnectionImpl.prepareStatement(java.lang.String sql, int resultSetType, int resultSetConcurrency, int resultSetHoldability)",  "sqlInfo": null,  "sqlId": 1,  "totalTime": "5555",  "simpleApiInfo": "/hcbtra :c.m.j.C.prepareStatement"  },  "maxTime": 2222,  "minTime": "3333",  "invokeTime": 2,  "avgTime": 2777  }  ],  "objectMaps": null,  "obj": null,  "success": true  } |

## 某条Sql



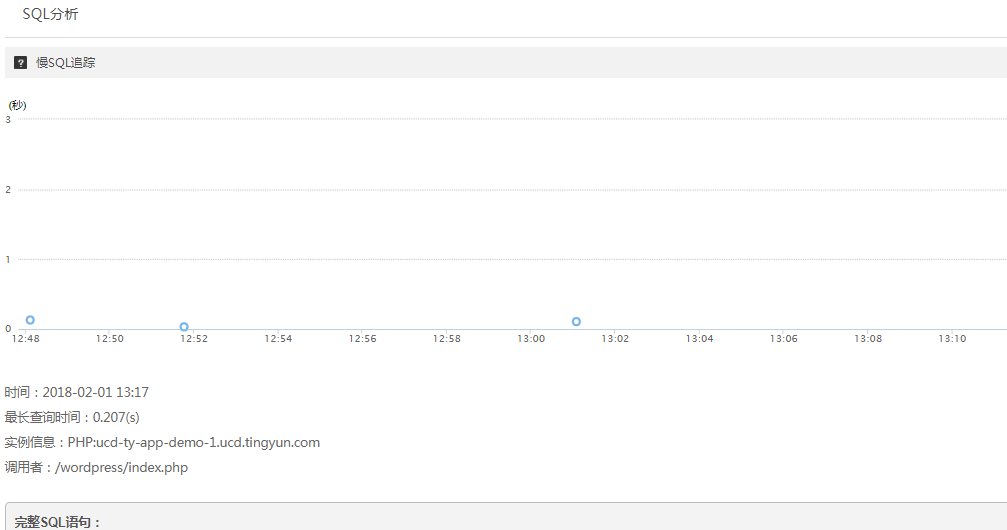
|  |
| --- |
| http://localhost:8082/apm/theSqlInfo.pinpoint?sqlId=&appId= |
| {  "errMsg": null,  "responeCode": "ok",  "objectList": null,  "objectMaps": null,  "obj": {  "dataBaseSqlViewVO": {  "rpc": "/hcbtra",（URL）  "apiInfo": (调用方法) "com.mysql.jdbc.ConnectionImpl.prepareStatement(java.lang.String sql, int resultSetType, int resultSetConcurrency, int resultSetHoldability)",  "sqlInfo": （SQL）"select \* from person",  "sqlId": 1,  "totalTime": (总时间)"5599",  "simpleApiInfo": "/hcbtra:c.m.j.C.prepareStatement/select"  },  "maxTime": （最大时间）3333,  "minTime": （最小时间）"44",  "invokeTime": （调用次数）3,  "avgTime": （平均消耗时间）1866  },  "success": true  } |

## 数据库响应时间曲线图



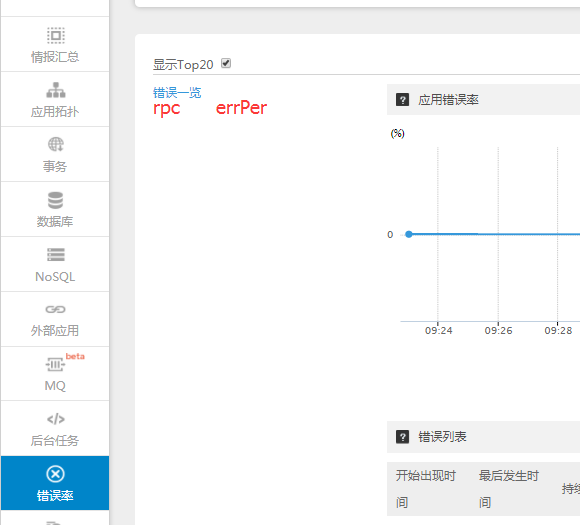
|  |
| --- |
| http://localhost:8082/apm/ databaseResponse.pinpoint?appId=& sqlCount=(做一个下拉框类似的用户选择，值为100,300,500,700,1000) |
| {  "errMsg": null,  "responeCode": "ok",  "objectList": [  {  "executeTime": 22,  "elapsed": 2222,  "sqlInfo": "update person set name=?",  "apiInfo": "Tomcat Servlet Asynchronous Process",  "rpc": "/hcbtra",  "spanEventId": "2",  "simpleApiInfo": "/hcbtra:Tomcat Servlet Asynchronous Pr.../update"  },  {  "executeTime": 66,  "elapsed": 2222,  "sqlInfo": "update person set name=?",  "apiInfo": "com.mysql.jdbc.ConnectionImpl.prepareStatement(java.lang.String sql, int resultSetType, int resultSetConcurrency, int resultSetHoldability)",  "rpc": "/hcbtra",  "spanEventId": "6",  "simpleApiInfo": "/hcbtra:c.m.j.C.prepareStatement/update"  },  {  "executeTime": 88,  "elapsed": 3333,  "sqlInfo": "update person set name=?",  "apiInfo": "com.mysql.jdbc.ConnectionImpl.setAutoCommit(boolean autoCommitFlag)",  "rpc": "/hcbtra",  "spanEventId": "8",  "simpleApiInfo": "/hcbtra:c.m.j.C.setAutoCommit/update"  },  {  "executeTime": 99,  "elapsed": 44,  "sqlInfo": "update person set name=?",  "apiInfo": "com.mysql.jdbc.ConnectionImpl.setAutoCommit(boolean autoCommitFlag)",  "rpc": "/hcbtra",  "spanEventId": "9",  "simpleApiInfo": "/hcbtra:c.m.j.C.setAutoCommit/update"  }  ],  "objectMaps": null,  "obj": null,  "success": true  } |

## 慢SQL 追踪（根据sqlid）



|  |
| --- |
| http://localhost:8082/apm/traceSqlBySqlId.pinpoint |
| {  "errMsg": null,  "responeCode": "ok",  "objectList": [  {  "executeTime": 66,  "elapsed": 2222,  "sqlInfo": "update person set name=?",  "apiInfo": "com.mysql.jdbc.ConnectionImpl.prepareStatement(java.lang.String sql, int resultSetType, int resultSetConcurrency, int resultSetHoldability)",  "rpc": "/hcbtra",  "spanEventId": "6",  "simpleApiInfo": "/hcbtra:c.m.j.C.prepareStatement/update"  },  {  "executeTime": 88,  "elapsed": 3333,  "sqlInfo": "update person set name=?",  "apiInfo": "com.mysql.jdbc.ConnectionImpl.setAutoCommit(boolean autoCommitFlag)",  "rpc": "/hcbtra",  "spanEventId": "8",  "simpleApiInfo": "/hcbtra:c.m.j.C.setAutoCommit/update"  },  {  "executeTime": 99,  "elapsed": 44,  "sqlInfo": "update person set name=?",  "apiInfo": "com.mysql.jdbc.ConnectionImpl.setAutoCommit(boolean autoCommitFlag)",  "rpc": "/hcbtra",  "spanEventId": "9",  "simpleApiInfo": "/hcbtra:c.m.j.C.setAutoCommit/update"  }  ],  "objectMaps": {    },  "obj": null,  "success": true  } |

## 错误率



|  |
| --- |
| <http://localhost:8082/apm/transactionErrPer.pinpoint>？appId= |
| {  "errMsg": null,  "responeCode": "ok",  "objectList": [  {  "errPer": "0.6667",  "rpc": "/hcbtra",  "appId": "11",  "invokeCount": 1,  "errCount": 6,  "totalMethodCount": 9  },  {  "errPer": "0.5000",  "rpc": "/aa",  "appId": "11",  "invokeCount": 2,  "errCount": 1,  "totalMethodCount": 2  }  ],  "objectMaps": null,  "obj": null,  "success": true  } |

## 异常列表

|  |
| --- |
| http://localhost:8082/apm/lastErrorList.pinpoint |
| {  "errMsg": null,  "responeCode": "ok",  "objectList": [  {  "rpc": "/hcbtra",  "appId": "11",  "exceptionMsg": "err......",  "startElapsed": 11  },  {  "rpc": "/hcbtra",  "appId": "11",  "exceptionMsg": "err......",  "startElapsed": 22  },  {  "rpc": "/aa",  "appId": "11",  "exceptionMsg": "err......",  "startElapsed": 22  },  {  "rpc": "/hcbtra",  "appId": "11",  "exceptionMsg": "err......",  "startElapsed": 33  },  {  "rpc": "/hcbtra",  "appId": "11",  "exceptionMsg": "err......",  "startElapsed": 66  },  {  "rpc": "/hcbtra",  "appId": "11",  "exceptionMsg": "err......",  "startElapsed": 88  },  {  "rpc": "/hcbtra",  "appId": "11",  "exceptionMsg": "err......",  "startElapsed": 99  }  ],  "objectMaps": null,  "obj": null,  "success": true  } |

## 应用服务及其响应时间

第一步查询agent id，作为参数

|  |
| --- |
| http://localhost:8082/apm/agentInfoByAppId.pinpoint?appId |
|  |

第二步查询，可以传入的参数是开始时间from,截止时间-to, sampleRate 给固定参数1

|  |
| --- |
| http://localhost:8082/apm/apmResponseTime/chart.pinpoint?agentId=pp20170916&from=1506012297000&to=1506012597001&sampleRate=1 |
|  |

## 每秒事务数

|  |
| --- |
| http://localhost:8082/apm/apmTransaction/chart.pinpoint?agentId=pp20170628&from=1517032838000&to=1517637638000&sampleRate=1 |
|  |

## CPU 图

|  |
| --- |
| http://localhost:8082/apm/apmCpuLoad/chart.pinpoint?agentId=pp20170628&from=1517032838000&to=1517637638000&sampleRate=1 |
|  |

## 活动线程数

|  |
| --- |
| http://localhost:8082/apm/apmActiveTrace/chart.pinpoint?agentId=pp20170628&from=1517032838000&to=1517637638000&sampleRate=1 |
|  |

## 堆内存图 JVM GC

|  |
| --- |
| http://localhost:8082/apm/apmJvmGc/chart.pinpoint?agentId=pp20170628&from=1517032838000&to=15176376380000&sampleRate=1 |
|  |

## 永久区内存Perm

|  |
| --- |
| http://localhost:8082/apm/apmJvmGcDetailed/chart.pinpoint?agentId=pp20170628&from=1517032838000&to=15176376380000&sampleRate=1 |
|  |

## 数据源信息

|  |
| --- |
| http://localhost:8082/apm/apmDataSource/chart.pinpoint?agentId=pp20170628&from=1517032838000&to=15176376380000&sampleRate=1 |
|  |

## TOPN事务同上，错误率同 异常列表。

## Apdex 值变化

|  |
| --- |
| http://localhost:8082/apm/getApdexVOByTimeAndAppId.pinpoint?appId= |
| {  "errMsg": null,  "responeCode": "ok",  "objectList": null,  "objectMaps": null,  "obj": {  "xaxisList": [  -6762027501152,  -6042027501152,  -5322027501152,  -4602027501152,  -3882027501152,  -3162027501152,  -2442027501152,  -1722027501152,  -1002027501152,  -282027501152,  437972498848,  1157972498848  ],  "yaxisList": [  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.375  ],  "schema": {  "xaxis": "TIME",  "yaxis": "APDEX\_VALUE"  }  },  "success": true  } |

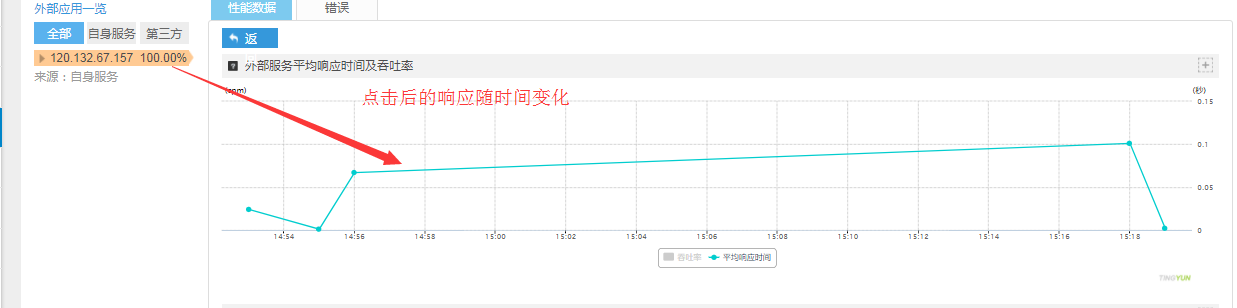
## 外部事务查询。



findType 会根据几个不同的值,比如HTTP 是8080， 。

|  |
| --- |
| http://localhost:8082/apm/outService.pinpoint? appId=?findType= |
| {  "errMsg": null,  "responeCode": "ok",  "objectList": [  {  "applicationName": "appname1",  "serviceType": "1010",  "per": "0.0870"  },  {  "applicationName": "appname1",  "serviceType": "8080",  "per": "0.9130"  }  ],  "objectMaps": null,  "obj": null,  "success": true  } |

## 外部服务随时间变化



|  |
| --- |
| <http://localhost:8082/apm/theOutServiceByTime.pinpoint>? serviceCode=& appId= |
| {  "errMsg": null,  "responeCode": "ok",  "objectList": null,  "objectMaps": null,  "obj": {  "xaxisList": [  1517159455463,  1517231455463,  1517303455463,  1517375455463,  1517447455463,  1517519455463,  1517591455463,  1517663455463,  1517735455463,  1517807455463,  1517879455463,  1517951455463  ],  "yaxisList": [  {  "beginTime": 1517771455463,  "endTime": 1517843455463,  "invokeCount": 1,  "avgTime": 33,  "maxTime": 33,  "minTime": 33  },  {  "beginTime": 1517843455463,  "endTime": 1517915455463,  "invokeCount": 3,  "avgTime": 24,  "maxTime": 39,  "minTime": 11  }  ]  },  "success": true  } |

## 用户登陆

|  |
| --- |
| http://localhost:8082/apm/checkUser.pinpoint?name=hcb&pwd=pp123 |
| {  "errMsg": null,  "responeCode": "ok",  "objectList": null,  "objectMaps": null,  "obj": true, //true 或false 表示登陆是否成功  "success": true  } |

## 添加用户

|  |
| --- |
| /apm/ addUser.pinpoint?参数如下 |
| 字段如下：  name;  pwd;  phoneNumber;  email; |

## 查询用户

|  |
| --- |
| /apm/userList.pinpoint |
|  |

## 修改用户信息

|  |
| --- |
| http://localhost:8082/apm/updateUserById.pinpoint?name=111&id=1 |
| 下述几个都可以修改：  number;  id;  name;  pwd;  phoneNumber;  email; |



## 删除用户

|  |
| --- |
| http://localhost:8082/apm/ deleteUserById.pinpoint?id = 用户的id |
|  |

|  |
| --- |
| http://localhost:8082/apm/addUser.pinpoint?name=&pwd=&phoneNumber=&email= |
|  |

## Agent 环境信息

|  |
| --- |
| http://localhost:8082/apm/getAgentInfoList.pinpoint?application=MyTestPP&from=1518316035000&to=1518316335000 |
| {  "localhost.localdomain": [  {  "applicationName": "MyTestPP",  "agentId": "pp20170628",  "startTimestamp": 1517437786528,  "hostName": "localhost.localdomain",  "ip": "fe80:0:0:0:20c:29ff:fe47:cd87%eth0",  "ports": "",  "serviceType": "TOMCAT",  "pid": 57922,  "vmVersion": "1.8.0\_131",  "agentVersion": "1.6.2",  "serverMetaData": {  "serverInfo": "Apache Tomcat/8.0.36",  "vmArgs": [  "-Djava.util.logging.config.file=/home/hcb/pinpoint/tomcat/apache-tomcat-8.0.36/conf/logging.properties",  "-Djava.util.logging.manager=org.apache.juli.ClassLoaderLogManager",  "-Djdk.tls.ephemeralDHKeySize=2048",  "-javaagent:/home/hcb/pinpoint/agent/pinpoint-bootstrap-1.6.2.jar",  "-Dpinpoint.agentId=pp20170628",  "-Dpinpoint.applicationName=MyTestPP",  "-Djava.endorsed.dirs=/home/hcb/pinpoint/tomcat/apache-tomcat-8.0.36/endorsed",  "-Dcatalina.base=/home/hcb/pinpoint/tomcat/apache-tomcat-8.0.36",  "-Dcatalina.home=/home/hcb/pinpoint/tomcat/apache-tomcat-8.0.36",  "-Djava.io.tmpdir=/home/hcb/pinpoint/tomcat/apache-tomcat-8.0.36/temp"  ],  "serviceInfos": [  {  "serviceName": "Catalina/localhost/test",  "serviceLibs": [  "json-lib-2.1-jdk15.jar",  "commons-collections-3.1.jar",  "commons-beanutils-1.7.0.jar",  "ezmorph-1.0.3.jar",  "commons-lang-2.5.jar",  "commons-logging.jar"  ]  },  {  "serviceName": "Catalina/localhost/manager",  "serviceLibs": [    ]  },  {  "serviceName": "Catalina/localhost/docs",  "serviceLibs": [    ]  },  {  "serviceName": "Catalina/localhost/",  "serviceLibs": [    ]  },  {  "serviceName": "Catalina/localhost/host-manager",  "serviceLibs": [    ]  },  {  "serviceName": "Catalina/localhost/examples",  "serviceLibs": [  "taglibs-standard-impl-1.2.5.jar",  "taglibs-standard-spec-1.2.5.jar"  ]  }  ]  },  "jvmInfo": {  "version": 0,  "jvmVersion": "1.8.0\_131",  "gcTypeName": "SERIAL"  },  "status": {  "agentId": "pp20170628",  "eventTimestamp": 1518316295878,  "state": {  "code": 100,  "desc": "Running"  }  },  "initialStartTimestamp": 0  }  ]  } |

**添加策略**

|  |
| --- |
| <http://localhost:8082/apm/monitor/addMonitorStrategy.pinpoint>?参数如上图 |
|  |

monitorType1,monitorRpm1,monitorTime1,monitorThrehold1\_ monitorType2,monitorRpm2,monitorTime2,monitorThrehold2

## 查询策略

|  |
| --- |
| http://localhost:8082/apm/monitor/findMonitorStrategy.pinpoint |
| {  "errMsg": null,  "responeCode": "ok",  "objectList": [  {  "id": 1,  "name": "m1",  "type": "app",  "monitors": "1,2",  "monitorList": [  {  "id": 1,  "type": "MONITOR\_RESPNOSE\_TIME",  "threshold": "1111111111",  "time": 911111111,  "rpm": 5  },  {  "id": 2,  "type": "MONITOR\_RESPNOSE\_TIME",  "threshold": "1111111111",  "time": 911111111,  "rpm": 5  }  ]  },  {  "id": 2,  "name": "name..",  "type": "outService",  "monitors": "5,6,",  "monitorList": [  {  "id": 5,  "type": "MONITOR\_RESPNOSE\_TIME",  "threshold": "1111111111",  "time": null,  "rpm": 3  },  {  "id": 6,  "type": "MONITOR\_RESPNOSE\_TIME",  "threshold": "1111111111",  "time": null,  "rpm": 3  }  ]  }  ],  "objectMaps": null,  "obj": null,  "success": true  } |

## 添加监控策略

|  |
| --- |
| http://localhost:8082/apm/monitor/addMonitorPro.pinpoint? userIds=&strategyId&appId |
|  |



## 报表

|  |
| --- |
| http://localhost:8082/apm/transactionForm.pinpoint |
| {  "errMsg": null,  "responeCode": "ok",  "objectList": [  {  "transactionUrl": "/aa/bb",  "list": [  {  "timeType": "WEEK",  "statisticsSectionTime": 582212000,  "statisticsTime": 1519724612949,  "avgResponseTime": 600.0,  "maxResponseTime": 1000.0,  "minResponseTime": 200.0,  "throughput": 0.0,  "errorPer": 0.666666666,  "apdex": 0.5,  "invokeCount": 3,  "transactionUrl": "/aa/bb",  "transactionPer": "0.6207"  },  {  "timeType": "YESTERDAY",  "statisticsSectionTime": 86400000,  "statisticsTime": 1519724613101,  "avgResponseTime": 600.0,  "maxResponseTime": 1000.0,  "minResponseTime": 200.0,  "throughput": 0.0,  "errorPer": 0.666666666,  "apdex": 0.5,  "invokeCount": 3,  "transactionUrl": "/aa/bb",  "transactionPer": "0.6207"  },  {  "timeType": "TODAY",  "statisticsSectionTime": 63813000,  "statisticsTime": 1519724613285,  "avgResponseTime": 600.0,  "maxResponseTime": 1000.0,  "minResponseTime": 200.0,  "throughput": 0.0,  "errorPer": 0.666666666,  "apdex": 0.5,  "invokeCount": 3,  "transactionUrl": "/aa/bb",  "transactionPer": "0.6207"  }  ]  },  {  "transactionUrl": "/ee/ff",  "list": [  {  "timeType": "WEEK",  "statisticsSectionTime": 582214000,  "statisticsTime": 1519724614222,  "avgResponseTime": 600.0,  "maxResponseTime": 1000.0,  "minResponseTime": 200.0,  "throughput": 0.0,  "errorPer": 0.666666666,  "apdex": 0.0,  "invokeCount": 3,  "transactionUrl": "/ee/ff",  "transactionPer": "0.6207"  },  {  "timeType": "YESTERDAY",  "statisticsSectionTime": 86400000,  "statisticsTime": 1519724614836,  "avgResponseTime": 600.0,  "maxResponseTime": 1000.0,  "minResponseTime": 200.0,  "throughput": 0.0,  "errorPer": 0.666666666,  "apdex": 0.0,  "invokeCount": 3,  "transactionUrl": "/ee/ff",  "transactionPer": "0.6207"  },  {  "timeType": "TODAY",  "statisticsSectionTime": 63815000,  "statisticsTime": 1519724615035,  "avgResponseTime": 600.0,  "maxResponseTime": 1000.0,  "minResponseTime": 200.0,  "throughput": 0.0,  "errorPer": 0.666666666,  "apdex": 0.0,  "invokeCount": 3,  "transactionUrl": "/ee/ff",  "transactionPer": "0.6207"  }  ]  }  ],  "objectMaps": null,  "obj": null,  "success": true  } |

## 数据库报表

|  |
| --- |
| <http://localhost:8082/apm/databaseForm.pinpoint>？timeStr=&appId |
| {  "errMsg": null,  "responeCode": "ok",  "objectList": [  {  "sqlInfo": "update person set name=?,delete \* from person",  "simpleSqlStr": "update,delete",  "rpcWithSqlMsg": null,  "list": [  {  "timeType": "WEEK",  "statisticsSectionTime": 518959000,  "statisticsTime": 1911111111112,  "avgResponseTime": 22.0,  "maxResponseTime": 33,  "minResponseTime": 11.0,  "totalTime": 66,  "throughput": 0.0,  "invokeCount": 3,  "apiInfo": "com.mysql.jdbc.ConnectionImpl.prepareStatement(java.lang.String sql, int resultSetType, int resultSetConcurrency, int resultSetHoldability)"  },  {  "timeType": "YESTERDAY",  "statisticsSectionTime": 86400000,  "statisticsTime": 1911111111112,  "avgResponseTime": 22.0,  "maxResponseTime": 33,  "minResponseTime": 11.0,  "totalTime": 66,  "throughput": 0.0,  "invokeCount": 3,  "apiInfo": "com.mysql.jdbc.ConnectionImpl.prepareStatement(java.lang.String sql, int resultSetType, int resultSetConcurrency, int resultSetHoldability)"  },  {  "timeType": "TODAY",  "statisticsSectionTime": 638000,  "statisticsTime": 1911111111112,  "avgResponseTime": 22.0,  "maxResponseTime": 33,  "minResponseTime": 11.0,  "totalTime": 66,  "throughput": 0.0,  "invokeCount": 3,  "apiInfo": "com.mysql.jdbc.ConnectionImpl.prepareStatement(java.lang.String sql, int resultSetType, int resultSetConcurrency, int resultSetHoldability)"  }  ]  },  {  "sqlInfo": "select \* from person",  "simpleSqlStr": "select",  "rpcWithSqlMsg": null,  "list": [  {  "timeType": "WEEK",  "statisticsSectionTime": 519075000,  "statisticsTime": 1911111111112,  "avgResponseTime": 22.0,  "maxResponseTime": 33,  "minResponseTime": 11.0,  "totalTime": 66,  "throughput": 0.0,  "invokeCount": 3,  "apiInfo": "com.mysql.jdbc.ConnectionImpl.prepareStatement(java.lang.String sql, int resultSetType, int resultSetConcurrency, int resultSetHoldability)"  },  {  "timeType": "YESTERDAY",  "statisticsSectionTime": 86400000,  "statisticsTime": 1911111111112,  "avgResponseTime": 22.0,  "maxResponseTime": 33,  "minResponseTime": 11.0,  "totalTime": 66,  "throughput": 0.0,  "invokeCount": 3,  "apiInfo": "com.mysql.jdbc.ConnectionImpl.prepareStatement(java.lang.String sql, int resultSetType, int resultSetConcurrency, int resultSetHoldability)"  },  {  "timeType": "TODAY",  "statisticsSectionTime": 676000,  "statisticsTime": 1911111111112,  "avgResponseTime": 22.0,  "maxResponseTime": 33,  "minResponseTime": 11.0,  "totalTime": 66,  "throughput": 0.0,  "invokeCount": 3,  "apiInfo": "com.mysql.jdbc.ConnectionImpl.prepareStatement(java.lang.String sql, int resultSetType, int resultSetConcurrency, int resultSetHoldability)"  }  ]  }  ],  "objectMaps": null,  "obj": null,  "success": true  } |