## 船舶数量及mmsi查询

按照开始时间和结束时间，一次请求该区域内该时间段的船舶数量及mmsi数据。

### 命令函数

输入：http://192.168.1.81:8080/REST/rest/ship/getShipData?startDate=20161208&endDate=20161209&range=38.99352,117.91851,38.95332,117.91096,38.91846,118.13274,38.87017,118.23299,38.87657,118.28913,38.93183,118.29599,38.96078,118.29874,38.97530,118.24467,38.99352,117.91851

|  |  |  |
| --- | --- | --- |
| **名称** | **属性标识** | **备注** |
| 开始时间 | startDate | 获取船舶轨迹点的开始时间，格式必须为yyyyMMdd |
| 分钟数 | endDate | 获取船舶轨迹点的结束时间，格式必须为yyyyMMdd |
| 区域经纬度 | range | 区域多边形的各顶点的维度经度字符串，各个点的维度和经度必须是按顺时针或逆时针方向书写，第一个点需要在最后重复出现一次 |

表格 1 区域回放获取函数命令

### 返回结果

返回的Json结果：

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **名称** | **类型** | **长度** | **属性标识** | **备注** |
| 日期 | **string** | 8 | day |  |
| 船舶数量 | **string** |  | count |  |
| mmsi数据 | **string** |  | mmsi |  |

表格 2 区域回放返回结果-Json

返回的Json结果：

|  |
| --- |
| {"days":[  //2016年12月9日的船舶数量  {"day":20161209,"count":196},  //2016年12月8日的船舶数量  {"day":20161208,"count":193}],  "mmsis":[  //所有的mmsi数据  {"mmsi":412285075,477110900,414009000,308796000,413440680,413695653,413488810,412285058,413488821,413795000,413358261,412285066,413331130,413204153,477778021,414160560,413439620,413304450,413358210,413376640,636011980,412283574,413695630,412284084,356042000,412703920,477778000,412018340,416459000,412434110,412283582,566294000,412284064,413839000,964446543,412266150,412286631,412766380,414736000,414931074,412284076,412285101,412285138,412283602,412018380,413303520,477335600,414049000,636091310,413303525,413153000,800030695,413441256,413322990,800030690,210616000,412271810,413707000,413303541,412018390,354459000,413750000,309972000,413788400,412303050,309972005,412271820,351246000,413412036,412284152,413944000,413302990,413581000,413203664,412302050,538003043,564354000,413481680,800016344,412018421,412286191,309971972,510177000,413202465,510504680,413700645,413717029,412543000,413098000,413302320,413405750,357848000,413785149,312830000,413202485,413399098,413202490,412324872,413232700,413700150,373687000,412302860,413717000,412703290,432817000,413700620,413377030,413272580,412499000,413463060,432667000,413325840,413377040,412302885,416337000,636015954,1038669138,371962000,235095231,413442149,413266021,477110964,800019306,412285015,800031082,413425250,346316386,413021270,412020806,412285019,497835365,477040800,413376620,477855400,412301380,800030582,413695090,412776000,477040818,413016640,413442170,969999666,412757630,413508160,150203925,412285045,412285051,789596666,477024900,413453390,412208250,413442120,413302350,412285055,412703860,413266000,308025000,413302367,413692840,247303100,538004240,412283796,413377957,413375909,413300650,412207000,413377450,412215192,477189500,413695397,412284291,413375930,413695410,413304760,413304248,413379000,412284303,413695413,412380597,412284336,413377920,412284337,412283831,636091073,440561000,413018037,413365640,440394000,412760490,412380580,413304210,412380581,412919726,352173000,413302170,413018020,345909156,412284333,413441509,413201380,413201381,412018120,412283861,413018070,413185000,412302810,412286936,412415960,412283871,413826021,414721000,413473269,412015070,413018060,352466000,413700090,412284359,413305333,413304821,413428220,412000212,413304824,412015060,413484030,351577000,413018050,215237000,413305340,412405706,538006384,636013697,413699010,413018101,370395000,413701060,413304780,413425620,412283875,412339172,413698000,413826000,413327320,687576448,687572352,413473240,413302560,412284183,538004887,413302565,414195000,412191000,412287256,127070723,572782000,413710651,412478720,414194981,413701950,413482290,201605022,412285192,412284168,412325640,477003253,412356360,412325644,412285197,477902300,412285238,413301510,538004917,413302020,412285243,412578620,413777666,412703541,477003200,443448768,477195200,312073000,800019485,412703530,422026900,538004901,412191013,412325669,416287080,412372270,636016212,566651000,371140000,413745000,566869000,412284247,413303660,413446005,413446000,413272950,414193000,319885000,255805666,567274000,412284237,477900700,356580000,412018030,412300659,375472000,412284272,413320000,413698890,412018021,412381025,413874000,412018037,412762980,412762981,  //2016-12-08到2016-12-09之间的船舶总数量  "count":317}]} |

表格 3 区域船舶返回结果-json

**1.1.3并发测试结果**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 范围 | 38.99352,117.91851,38.95332,117.91096,38.91846,118.13274,38.87017,118.23299,38.87657,118.28913,38.93183,118.29599,38.96078,118.29874,38.97530,118.24467,38.99352,117.91851 | | | | |
| 请求方式 | 并发线程数 | 开始时间 | 结束时间 | 间隔天数 | 返回时长（秒） |
| POST/GET | 12 | 20161201 | 20161203 | 3 | 3 |
| POST/GET | 12 | 20161215 | 20161217 | 3 | 3 |
| POST/GET | 12 | 20161223 | 20161225 | 3 | 3 |
| POST/GET | 31 | 20160307 | 20160309 | 3 | 3 |
| POST/GET | 12 | 20160307 | 20160314 | 7 | 3 |
| POST/GET | 29 | 20160607 | 20160609 | 3 | 3 |
| POST/GET | 26 | 20151201 | 20151203 | 3 | 3 |
| POST/GET | 33 | 20150911 | 20150913 | 3 | 3 |
| POST/GET | 9 | 20150911 | 20150917 | 7 | 3 |