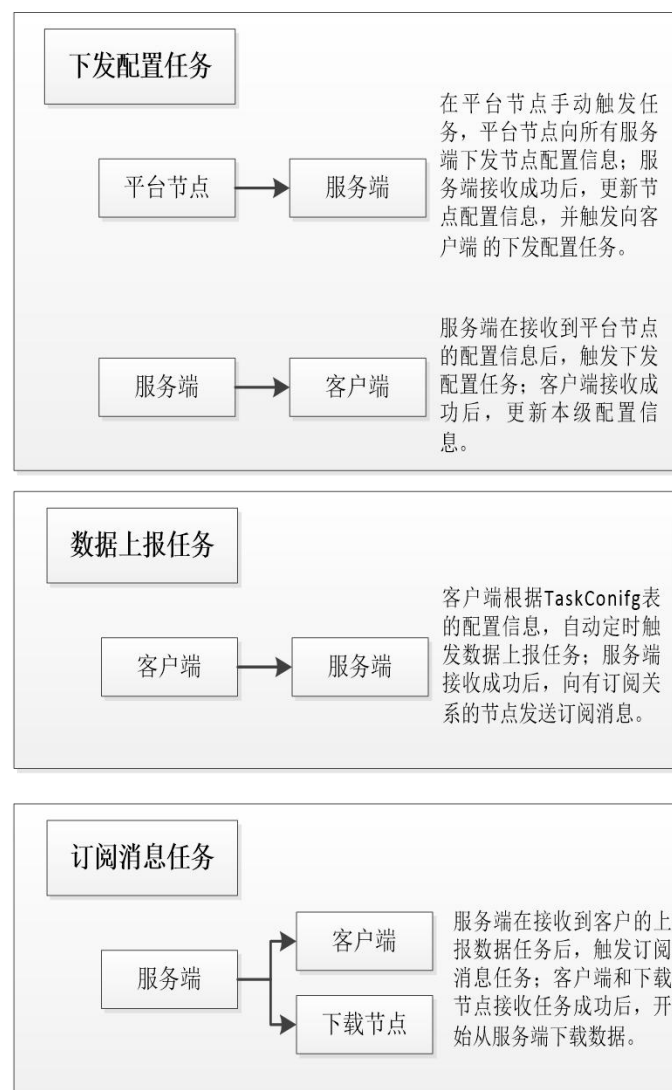
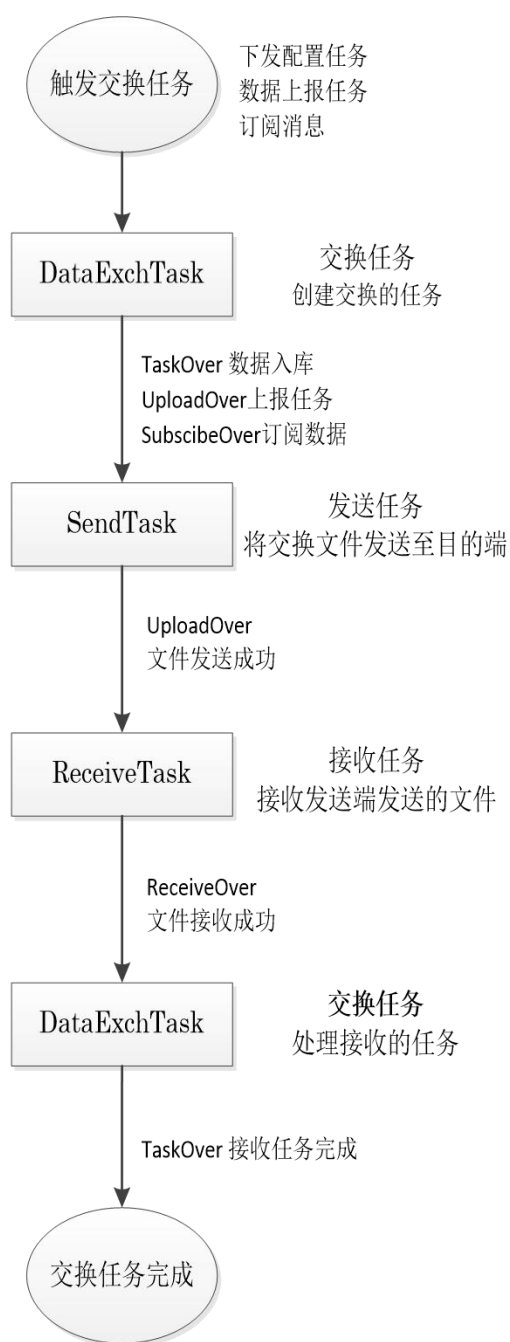


# 国控3.0云交换平台流程图



### 交换问题排查点:

- 1.交换表中多一个字段
- 2.没有生成作业
- 3.交换程序故障
- 4.交换表里面缺失业务的表
- 5.启动两个交换程序
- 6.从字符串转换日期和时间是，转换失败
- 7.订阅关系
- 8.网络问题
- 9.有未完成的任务

常用的表

```
select * from DataExchange.LocalNodeInfo
select * from DataExchange.DataExchUpdateDate
update DataExchange.TaskConfig
set nextexchtime ='2013-8-1 10:20:00'
where ClientNodeID like '1522%' and isused=1
select * from DataExchange.DataExchTask
select * from DataExchange.ExchDataTypeInfo
where exchdatatype='PSMCore.PSBaseInfo'
```

### 1 省厅和地市的数据以及数据状态不一致的问题。

1.1 如地市数据有，数据状态有效，省厅无数据，数据状态无效。执行以下语句，重新交换

至省厅即可。

异常日志报：从字符串转换日期和时间是，转换失败。



交换中数据转换报错.txt

有关 Visual studio 报错调试的交换的问题。

## 2 基本信息交换的问题交换不上去

排查2.1. 查询表里面是不是少一张表

```
select * from DataExchange.ExchDataTypeInfo
where exchdatatype='PSMCore.PSBaseInfo'
```

一般工业企业

重点污染源监控系统数据库系统

基本(备案)信息维护

内蒙古包钢稀土钢板材有限责任公司

企业名称: 包钢稀土钢板材有限责任公司

所属环保机构: 包头市

企业编号: 100

中心经度: 109° 43' 18"

中心纬度: 40° 37' 9"

社会信用代码(法人代码): 58517702-X

关注程度: 国控

国控类型: 气国控

单位类别: 县以上工业企业

注册类型: 国有企业

监测类型: 气重点

污染源别名: 大型一档

行业类别: 黑色金属冶炼及压延加工业

企业规模: 大型一档

隶属关系: 中央

地区代码: 昆都仑区

流域: 黄河上游干流区

总占地面积(㎡):

单位地址: 包钢厂区

是否可监控: 是

投产日期: 2016-05-27

法定代表人: 30万千瓦电力企业: 否

企业环保部门: 环保负责人: 专职环保人员数:

开户银行: 银行账号: 办公电话: 邮政编码: 联系人:

移动电话: 传真: 0472-2180203

通讯地址:

备注:

SQLQuery1. s... (sa (325))

```
select * from DataExchange.ExchDataTypeInfo
where exchdatatype='PSMCore.PSBaseInfo'
```

| EPDCode | ExchDataType | TableName          | SplitCode                          | SplitSQL   | SplitComments |
|---------|--------------|--------------------|------------------------------------|------------|---------------|
| 19      | 0            | PSMCore.PSBaseInfo | PSInfo.OutputBaseInfoModifyRe...   | NULL       | NULL          |
| 20      | 0            | PSMCore.PSBaseInfo | PSInfo.OutputPollutionModifyRec... | NULL       | NULL          |
| 21      | 0            | PSMCore.PSBaseInfo | PSInfo.ProjectBaseInfo             | NULL       | NULL          |
| 22      | 0            | PSMCore.PSBaseInfo | PSInfo.PSBaseInfo                  | select ... | NULL          |
| 23      | 0            | PSMCore.PSBaseInfo | PSInfo.PSBaseInfoCheck             | NULL       | NULL          |
| 24      | 0            | PSMCore.PSBaseInfo | PSInfo.PSBaseInfoModifyRecord      | NULL       | NULL          |
| 25      | 0            | PSMCore.PSBaseInfo | PSInfo.PSRunRecord                 | NULL       | NULL          |
| 26      | 0            | PSMCore.PSBaseInfo | PSInfo.PSStatus                    | NULL       | NULL          |
| 27      | 0            | PSMCore.PSBaseInfo | PSInfo.PTEInfo                     | NULL       | NULL          |
| 28      | 0            | PSMCore.PSBaseInfo | PSInfo.PTERunRecord                | NULL       | NULL          |
| 29      | 0            | PSMCore.PSBaseInfo | PSInfo.PSBaseInfo                  | NULL       | NULL          |

## 2.2 检查作业是不是正常

```
select * from DataExchange.PSReport
where psgroup=150200000083
```

作业报错, 重新生成作业重新执行即可。

## 4 一个任务产生多条记录的问题:

| beginTime               | taskStatus   | TaskID                               | TaskCode         | TaskName | AimNodeID | ExchNodeID | SystemID | ExchType | ExchDataType     |
|-------------------------|--------------|--------------------------------------|------------------|----------|-----------|------------|----------|----------|------------------|
| 2015-09-07 00:00:00.000 | ExportQueued | E205C2FD-3468-4A5A-8C6D-8DBF39D035E5 | PSMCore.HourData | 上报小时数据   | 33000001  | 33040001   | PSMCore  | Report   | PSMCore.HourData |
| 2015-09-07 00:00:00.000 | ExportQueued | E3826FC3-5812-47DE-9C51-8FB8F208A6F0 | PSMCore.HourData | 上报小时数据   | 33000001  | 33040001   | PSMCore  | Report   | PSMCore.HourData |
| 2015-09-07 00:00:00.000 | ExportQueued | 63F12545-430D-496C-8661-A132A29A3A39 | PSMCore.HourData | 上报小时数据   | 33000001  | 33040001   | PSMCore  | Report   | PSMCore.HourData |
| 2015-09-07 00:00:00.000 | ExportQueued | B86322D7-5D19-4A31-8E85-E2AC7E93B825 | PSMCore.HourData | 上报小时数据   | 33000001  | 33040001   | PSMCore  | Report   | PSMCore.HourData |
| 2015-09-07 00:00:00.000 | ExportQueued | 30AAB7C3-8EAD-4DF1-9588-E7A9444D5F03 | PSMCore.HourData | 上报小时数据   | 33000001  | 33040001   | PSMCore  | Report   | PSMCore.HourData |
| 2015-09-07 00:00:00.000 | Compressing  | 2922A4D8-477E-467D-8CEE-E5692DFDE190 | PSMCore.DayData  | 上报日数据    | 33000001  | 33040001   | PSMCore  | Report   | PSMCore.DayData  |
| 2015-09-07 00:00:00.000 | Compressing  | 06494427-01AD-43F6-8E24-5EAB9F8D718A | PSMCore.DayData  | 上报日数据    | 33000001  | 33040001   | PSMCore  | Report   | PSMCore.DayData  |
| 2015-09-07 00:00:00.000 | Compressing  | 88CE4D3C-7573-4FA3-AD3D-555017703537 | PSMCore.DayData  | 上报日数据    | 33000001  | 33040001   | PSMCore  | Report   | PSMCore.DayData  |
| 2015-09-07 00:00:00.000 | Compressing  | 177AE472-AB78-4E2E-A905-490EE7713C64 | PSMCore.HourData | 上报小时数据   | 33000001  | 33040001   | PSMCore  | Report   | PSMCore.HourData |
| 2015-09-07 00:00:00.000 | ExportQueued | 2C09C46A-CEFA-4116-843D-0762EBC0B36A | PSMCore.HourData | 上报小时数据   | 33000001  | 33040001   | PSMCore  | Report   | PSMCore.HourData |
| 2015-09-07 00:00:00.000 | Compressing  | 556B4948-60CD-4B8C-A7E3-6B378D956755 | PSMCore.DayData  | 上报日数据    | 33000001  | 33040001   | PSMCore  | Report   | PSMCore.DayData  |

解决办法: 由于两个交换程序在运作导致此类问题出现, 请核实确认那个交换是正在使用

的，将不用的交换卸载。

|     | LogID | Time                    | Operator                             | Operation              | MachineAddress  | Message               |
|-----|-------|-------------------------|--------------------------------------|------------------------|-----------------|-----------------------|
| 348 | 348   | 2015-09-18 10:14:46.000 | ab6cad02-7e5e-4542-9b28-f3b301deeab4 |                        | WIN-YGVWL9LIU9D | 任务状态编码: 0重试次数: 0      |
| 349 | 349   | 2015-09-18 10:14:46.000 | ab6cad02-7e5e-4542-9b28-f3b301deeab4 | UpdateNextExchangeTime | WIN-YGVWL9LIU9D | 更新交换时间戳: 1            |
| 350 | 350   | 2015-09-18 10:14:46.000 | ab6cad02-7e5e-4542-9b28-f3b301deeab4 | CheckUploadStatus      | WIN-YGVWL9LIU9D | 交换任务上报完毕              |
| 351 | 351   | 2015-09-18 10:14:46.000 |                                      | UploadTask             | WIN-YGVWL9LIU9D | CheckUploadStatus2: 0 |
| 352 | 352   | 2015-09-18 09:53:44.000 | ab6cad02-7e5e-4542-9b28-f3b301deeab4 | CompressReportTask     | 10.33.70.48     | 压缩交换数据文件开始            |
| 353 | 353   | 2015-09-18 09:58:15.000 | ab6cad02-7e5e-4542-9b28-f3b301deeab4 |                        | 10.33.70.48     | 任务重试准备: 1: 33000001   |
| 354 | 354   | 2015-09-18 09:58:15.000 | ab6cad02-7e5e-4542-9b28-f3b301deeab4 |                        | 10.33.70.48     | 任务重试准备: 1             |
| 355 | 355   | 2015-09-18 09:58:15.000 | ab6cad02-7e5e-4542-9b28-f3b301deeab4 | CompressReportTask     | 10.33.70.48     | 压缩交换数据文件完毕            |
| 356 | 356   | 2015-09-18 09:58:24.000 | ab6cad02-7e5e-4542-9b28-f3b301deeab4 | CompressReportTask     | 10.33.70.48     | 压缩交换数据文件开始            |
| 357 | 357   | 2015-09-18 10:15:06.000 |                                      | TaskTimerCallBack      | WIN-YGVWL9LIU9D | 开始分发消息组件!             |
| 358 | 358   | 2015-09-18 10:15:26.000 |                                      | TaskTimerCallBack      | WIN-YGVWL9LIU9D | 开始创建任务组件              |
| 359 | 359   | 2015-09-18 10:15:26.000 |                                      | TaskTimerCallBack      | WIN-YGVWL9LIU9D | 开始分发消息组件!             |
| 360 | 360   | 2015-09-18 10:15:46.000 |                                      | TaskTimerCallBack      | WIN-YGVWL9LIU9D | 开始分发消息组件!             |
| 361 | 361   | 2015-09-18 10:16:06.000 |                                      | TaskTimerCallBack      | WIN-YGVWL9LIU9D | 开始分发消息组件!             |
| 362 | 362   | 2015-09-18 10:16:26.000 |                                      | TaskTimerCallBack      | WIN-YGVWL9LIU9D | 开始创建任务组件              |
| 363 | 363   | 2015-09-18 10:16:26.000 |                                      | TaskTimerCallBack      | WIN-YGVWL9LIU9D | 开始分发消息组件!             |
| 364 | 364   | 2015-09-18 10:16:46.000 |                                      | TaskTimerCallBack      | WIN-YGVWL9LIU9D | 开始分发消息组件!             |

5.导出数据拼的 sql 不完整，导致地市和国家数据状态不一致

以陕西为例，地市的数据状态是 0，国家的数据状态是 null，没有失败的任务。

排查过程：

省厅现场端数据先到省厅，在省厅转发到地市，并且省厅数据量比较大，入库比较慢，所以省厅入库的各地市数据状态是 null,陕西省产生的任务，本应该只交换省厅自动监控库中（AutoMonitorDBV3）DataExchange.PSReport 表中的企业的数据，由于交换程序在生成导出数据的 sql 时，sql 没有拼完整,导致省厅任务导出了全省企业这段时间内的数据，并交换到国家。

正确拼的 sql

```
select * from MonitorOperationData.GasFacHourData with(nolock) where UpdateDate >= '2015/3/26 2:58:58' and exists ( select * from DataExchange.PSReport psr where psr.PSCode = MonitorOperationData.GasFacHourData.PSCode )
```

未拼完整的sql

```
select * from MonitorOperationData.GasFacHourData with(nolock) where UpdateDate >= '2015/3/24 14:58:23'
```

在 ExchangeDB 库的 DataExchange.DataExchTaskinfo 可以看到拼的 sql 是否

正确

```
select * from DataExchange.DataExchTaskinfo
where taskid in (select taskid from DataExchange.DataExchTask
where (taskname = '上报小时数据' or taskname = '上报日数据')
and exchnodeid='61000001' and exchtype='report')
```

| id | ExchData type   | SplitSQL                                                                                                                                                                                                       |
|----|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1  | PSMCore.DayData | select * from MonitorOperationData.TGasOutputDayData with(nolock) where UpdateDate >= '2015/3/25 1:13:03' and exists ( select * from DataExchange.PSReport psr where psr.PSCode = MonitorOperationData.TGasO   |
| 2  | PSMCore.DayData | select * from MonitorOperationData.TWaterFacDayData with(nolock) where UpdateDate >= '2015/3/25 1:13:03' and exists ( select * from DataExchange.PSReport psr where psr.PSCode = MonitorOperationData.TWate    |
| 3  | PSMCore.DayData | select * from MonitorOperationData.TWaterInputDayData with(nolock) where UpdateDate >= '2015/3/25 1:13:03' and exists ( select * from DataExchange.PSReport psr where psr.PSCode = MonitorOperationData.TWat   |
| 4  | PSMCore.DayData | select * from MonitorOperationData.TWaterInputFacDayData with(nolock) where UpdateDate >= '2015/3/25 1:13:03' and exists ( select * from DataExchange.PSReport psr where psr.PSCode = MonitorOperationData.TW  |
| 5  | PSMCore.DayData | select * from MonitorOperationData.TWaterOutputDayData with(nolock) where UpdateDate >= '2015/3/25 1:13:03' and exists ( select * from DataExchange.PSReport psr where psr.PSCode = MonitorOperationData.TW    |
| 6  | PSMCore.DayData | select * from MonitorOperationData.WaterFacDayData with(nolock) where UpdateDate >= '2015/3/25 1:13:03' and exists ( select * from DataExchange.PSReport psr where psr.PSCode = MonitorOperationData.WaterFa   |
| 7  | PSMCore.DayData | select * from MonitorOperationData.WaterFacHouData with(nolock) where UpdateDate >= '2015/3/25 1:13:03' and exists ( select * from DataExchange.PSReport psr where psr.PSCode = MonitorOperationData.WaterF    |
| 8  | PSMCore.DayData | select * from MonitorOperationData.WaterInputDayData with(nolock) where UpdateDate >= '2015/3/25 1:13:03' and exists ( select * from DataExchange.PSReport psr where psr.PSCode = MonitorOperationData.WaterIn |
| 9  | PSMCore.DayData | select * from MonitorOperationData.WaterInputFacDayData with(nolock) where UpdateDate >= '2015/3/25 1:13:03' and exists ( select * from DataExchange.PSReport psr where psr.PSCode = MonitorOperationData.Wa   |
| 10 | PSMCore.DayData | select * from MonitorOperationData.WaterOutputDayData with(nolock) where UpdateDate >= '2015/3/25 1:13:03' and exists ( select * from DataExchange.PSReport psr where psr.PSCode = MonitorOperationData.Wate   |
| 11 | PSMCore.DayData | select * from MonitorOperationData.WaterOutputHouData with(nolock) where UpdateDate >= '2015/3/25 1:13:03' and exists ( select * from DataExchange.PSReport psr where psr.PSCode = MonitorOperationData.Wate   |
| 12 | PSMCore.HouData | select * from MonitorOperationData.GasFacHouZuData with(nolock) where UpdateDate >= '2015/3/24 14:58:23'                                                                                                       |
| 13 | PSMCore.HouData | select * from MonitorOperationData.GasOutputHouData with(nolock) where UpdateDate >= '2015/3/24 14:58:23'                                                                                                      |
| 14 | PSMCore.HouData | select * from MonitorOperationData.WaterFacHouData with(nolock) where UpdateDate >= '2015/3/24 14:58:23'                                                                                                       |
| 15 | PSMCore.HouData | select * from MonitorOperationData.WaterInputFacHouData with(nolock) where UpdateDate >= '2015/3/24 14:58:23'                                                                                                  |
| 16 | PSMCore.HouData | select * from MonitorOperationData.WaterInputHouData with(nolock) where UpdateDate >= '2015/3/24 14:58:23'                                                                                                     |
| 17 | PSMCore.HouData | select * from MonitorOperationData.WaterOutputHouData with(nolock) where UpdateDate >= '2015/3/24 14:58:23'                                                                                                    |

解决方法:

1.由于省厅没有要交换的企业, 把陕西省厅的交换任务停掉

```
update DataExchange.TaskConfig
set isused=0
where ClientNodeID in (select ExchNodeCode from
DataExchange.LocalNodeInfo)
and isused=1
```

2.研发修改程序, 本次修改内容:

1).数据库系统表首次加载更新到内存, 以后直接读取缓存, 减少与数据库交换;

2).加入判断: 日数据、小时数据导出 sql 必须加筛选条件。

修改版本与 2015-03-26 14:30 交于服务

## 6. 垃圾焚烧交换数据无法交换, 缺聚合索引

任务报如下错误:

不能在具有唯一索引 “ix\_key\_realtime\_furnace” 的对象 “md.realtime\_infurnace” 中插入重复键的行。重复键值为 (51070000018422, T30, 08 13 2018 10:51AM)。

由于见的表没有聚合索引导致同一条数据可以重复入库

