**II采测试系统与MES系统接口**

# 会议纪要

2018年06月22日，在胶州制造中心，东软同事与摩尔实施人员进行了II采测试系统与MES系统接口的需求调研和确认。

会议纪要如下：

1. 两个系统的唯一标识是II 采产品的通信地址（12位字符串）

在MES系统中进行通信地址与资产编号的对应，对应算法不在本次会议讨论范围内

1. 不良编码信息，由制造中心品质管理人员在MES系统中进行维护，提供给II采系统开发人员

目前常用的II采测试项目如下，请品质管理人员参考：

红外设置设备地址（FE）

红外有地址抄485表

红外设置省份模式

红外读取省份模式

载波读PLCM1643程序版本

载波有地址抄485表

红外读PLCM1643程序版本

3、为了更好的实现测试追溯，通过接口将较为完整的测试过程数据提供给MES系统，接口格式定义如下：

1）字段说明，字段内容说明

addr为通信地址信息

status为枚举类型：OK、NG

errcode为枚举类型，存储不良代码来自MES系统

opdatetime为测试数据产生时间

operator为操作人姓名

devtype为枚举类型，存储测试类型：II型采集器、集中器

ID为测试用例的ID信息

name为测试用例的名称

result为测试用例的执行结果

sendtimes为测试用例的执行次数

send为发送出去报文

recv为接收到的报文

expect为期望收到的报文

sendtime为发送时间

recvtime为接收时间

port为发送端口信息

runID为运行批次信息

2）数据格式及举例：

{

"addr ":"123456789012",

"status":"210",

"errcode":"plc-read485err",

"opdatetime":"2018-06-23 10:47:10:252",

"operator":"李花",

"devtype ":"II型采集器",

"ITEMS":

[

{

"ID:"1",

"name":"红外设置设备地址（FE）",

"result":"成功",

"sendtimes":"1",

"send":"FE FE FE FE 68AAAAAAAAAAAA68150694B33C3333330316",

"recv":"686180090000006895004F16",

"expect":"68 \*\*8\*09000000 68 95 00 \*\* 16",

"sendtime":"2018-06-23 10:42:56:778",

"recvtime":"2018-06-23 10:42:57:845",

"port":"1",

"runID":"3195630"

},

{

"ID:"2",

"name":"载波有地址抄485表",

"result":"超时",

"sendtimes":"9",

"send":"FE FE FE FE 68AAAAAAAAAAAA68150694B33C3333330316",

"recv":"",

"expect":"68 618009000000 68 91 0E 33 33 34 33 \*\* \*\* \*\* \*\* 383333333333 \*\* 16",

"sendtime":"2018-06-23 10:45:08:848",

"recvtime":"",

"port":"RT",

"runID":"3195630"

}

]

}

如文档有错误，或是对文档的内容有异议，欢迎指正。

测试工艺部 II采测试系统开发人员 许开颜

# 设计文档-实现思路

需要传输的历史数据很多，需要减少延时，因为还有后续工种，或是一边测试一边上传？

在某些情况下，MES系统未开启，导致部分数据没有上传，需要按照某种算法进行数据传递

1、新建表TransManageData，用于传递数据的管理 进行三个系统数据的交互 MES系统、II采测试系统、数据传输系统

1. 测试完成的数据，添加到TransManageData表中，且优先级设置为最高级

主表为devInfo表，实际需要传输的是result子表数据

允许一个传输多个result子表数据，但是对总的数据长度应该有所控制

传输过的数据、传输成功的数据需要进行记录，就不再上传了

1. 轮询任务，优先将这样的数据通过MES接口进行数据传递

1. 外部查询模块，可以看到数据的传递情况，因为可能因为网络原因，数据无法进行传递
2. 另外一个优先级低的任务，判断有哪些不重要的历史数据需要传递，进行数据标记

Here we go

I am the guard.

测试用例与不良编码对照关系 根据测试用例的中文含义，自动匹配到相应的不良代码

红外设置设备地址（FE） 红外信道异常

红外有地址抄485表 485信道异常

红外设置省份模式 设置省份模式异常

红外读取省份模式 读取省份模式异常

载波读PLCM1643程序版本 程序版本异常

载波有地址抄485表 载波信道异常 485信道异常

红外读PLCM1643程序版本 程序版本异常

select \* from devinfo where addr = "4462170A134A";

select \* from producecaseresult where runid in( select ID from producelog where addr = "4462170A134A" and operation = "扫描条码(1)" );

producecaseresult 中的数据根据runid进行分类

数据结构关系

1. 主表：设备信息
2. 子表：表一次测试的汇总信息
3. 子表的子表：一次测试的多个测试用例明细

一个设备可以执行多次测试，每次测试都有一个或多个测试用例

{

"addr ":"4462170A134A",

"status":"OK",

"errcode":"",

"opdatetime":"2018-05-21 16:18:05:587",

"operator":"劳雪帅",

"devtype ":"II型采集器",

"ITEMS":

[

{

"ID":"3195544",

"result":"超时",

"optime":"2018-05-21 15:56:55:702",

"operator":"劳雪帅",

"ITEMS":

[

{

"ID:"6138702",

"name":"载波无地址抄485表",

"result":"超时",

"sendtimes":"2",

"send":"6802000000000068110433333433B416",

"recv":"",

"expect":"68 020000000000 68 91 08 33 33 34 33 \*\* \*\* \*\* \*\* \*\* 16",

"sendtime":"2018-05-21 15:57:00:091",

"recvtime":"",

"port":"1"

}

]

},

{

"ID":"3195630",

"result":"成功",

"optime":"2018-05-21 16:17:57:692",

"operator":"劳雪帅",

"ITEMS":

[

{

"ID:"6138814",

"name":"载波无地址抄485表",

"result":"成功",

"sendtimes":"2",

"send":"6802000000000068110433333433B416",

"recv":"68 02 00 00 00 00 00 68 91 08 33 33 34 33 66 33 33 33 37 16 ",

"expect":"68 020000000000 68 91 08 33 33 34 33 \*\* \*\* \*\* \*\* \*\* 16",

"sendtime":"2018-05-21 16:18:01:308",

"recvtime":"2018-05-21 16:18:03:471",

"port":"1"

},

{

"ID:"6138816",

"name":"红外设置设备地址（FE）",

"result":"成功",

"sendtimes":"1",

"send":"FE FE FE FE 68AAAAAAAAAAAA6815067D463D4A95773D16",

"recv":"FE FE FE FE 68 4A 13 0A 17 62 44 68 95 00 89 16",

"expect":"FE FE FE FE 68 \*\*\*\*0\*176244 68 95 00 \*\* 16",

"sendtime":"2018-05-21 16:18:03:809",

"recvtime":"2018-05-21 16:18:04:309",

"port":"1"

},

{

"ID:"6138817",

"name":"红外读PLCM1643程序(FE)",

"result":"成功",

"sendtimes":"1",

"send":"FE FE FE FE 684A130A1762446811043433B3375A16",

"recv":"FE FE FE FE 68 4A 13 0A 17 62 44 68 91 24 34 33 B3 37 83 7F 76 80 64 69 60 7C 7C 60 81 8A 5B A9 64 61 65 5C 60 64 6A 63 6C 63 6B 53 53 53 53 53 53 53 1C 16",

"expect":"FEFEFEFE684A130A176244 68 91 24 34 33 B3 37 83 7F 76 80 64 69 60 7C 7C 60 81 8A 5B A9 64 61 65 5C 60 64 6A 63 6C 63 6B 53 53 53 53 53 53 53 \*\* 16",

"sendtime":"2018-05-21 16:18:04:579",

"recvtime":"2018-05-21 16:18:05:369",

"port":"1"

}

]

}

]

}

select \* from devinfo where addr = "4462170A134A";

select \* from producelog where addr = "4462170A134A" order by optime;

select \* from producecaseresult where runid in( select ID from producelog where addr = "4462170A134A" and operation = "扫描条码(1)" ) order by sendtime;

可以考虑，先放在两张表中，一张表优先级高、一张表优先级低

<http://10.1.200.16:8088/MesFrameWork.asmx?op=UploadTestWORKData>

测试数据

{"addr":"01","status":"210","ITEMS":[{"ID":"1","name":"1","result":"10-23s-00","subid":"123232","caseno":"1"}]}

{"addr":"000000098064","status":"NG","errcode":"红外设置设备地址（FE）","opdatetime":"2018-06-28 15:50:11:463","operator":"admin","devtype":"II型采集器","ITEMS":[{"ID":"1453982","result":"","optime":"2018-06-28 15:49:52:133","operator":"admin","ITEMS":[{"ID":"2990880","name":"红外设置设备地址（FE）","result":"超时","sendtimes":"11","send":"FE FE FE FE 68AAAAAAAAAAAA68150697B33C3333330616","recv":"","expect":"68 \*\*8\*09000000 68 95 00 \*\* 16","sendtime":"2018-06-28 15:50:09:492","recvtime":"2018-06-28 15:50:11:346","port":"4"}]}]}

{"addr":"000000098061","status":"OK","errcode":"","opdatetime":"2018-06-28 15:50:15:453","operator":"admin","devtype":"II型采集器","ITEMS":[{"ID":"1453983","result":"","optime":"2018-06-28 15:49:52:132","operator":"admin","ITEMS":[{"ID":"2990881","name":"红外设置设备地址（FE）","result":"成功","sendtimes":"1","send":"FE FE FE FE 68AAAAAAAAAAAA68150694B33C3333330316","recv":"686180090000006895004F16","expect":"68 \*\*8\*09000000 68 95 00 \*\* 16","sendtime":"2018-06-28 15:49:52:867","recvtime":"2018-06-28 15:49:53:249","port":"1"},{"ID":"2990884","name":"红外读PLCM1643程序(FE)[SAVEID]","result":"成功","sendtimes":"1","send":"FE FE FE FE 686180090000006811043433B3372016","recv":"686180090000006891243433B337837F768064696966927C7C5BA96464746663695C92646A6465656B53535353534416","expect":"686180090000006891243433B337837F768064696966927C7C5BA96464746663695C92646A6465656B53535353534416","sendtime":"2018-06-28 15:49:53:521","recvtime":"2018-06-28 15:49:54:248","port":"1"},{"ID":"2990887","name":"设置省份模式","result":"成功","sendtimes":"1","send":"FE FE FE FE 6861800900000068140D323A3337374444448786747837E416","recv":"686180090000006894004E16","expect":"68 618009000000 68 94 00 \*\* 16","sendtime":"2018-06-28 15:49:54:488","recvtime":"2018-06-28 15:49:54:949","port":"1"},{"ID":"2990890","name":"读取省份模式","result":"成功","sendtimes":"1","send":"FE FE FE FE 68618009000000681104323A3337A516","recv":"68618009000000689105323A3337375D16","expect":"68 618009000000 68 91 05 32 3A 33 37 37 \*\* 16","sendtime":"2018-06-28 15:49:55:343","recvtime":"2018-06-28 15:49:55:748","port":"1"},{"ID":"2990892","name":"载波有地址抄485表","result":"成功","sendtimes":"1","send":"6861800900000068110A33333433383333333333D916","recv":"6861800900000068910E33333433563533333833333333334E16","expect":"68 618009000000 68 91 0E 33 33 34 33 \*\* \*\* \*\* \*\* 383333333333 \*\* 16","sendtime":"2018-06-28 15:50:13:518","recvtime":"2018-06-28 15:50:14:360","port":"RT"}]}]}

得到的结果信息 OK表示成功

<?xml version="1.0" encoding="UTF-8"?>

<string xmlns="**http://device.service.moresoft.com/**">OK</string>