

Unit Test Report for AAA System

- Test Cases Specification
- Test Summary Report

Project Team

Team 7

Date

2014-11-20

박재원 201011332

김철진 201211032

장계인 201312412

Table of Contents

1	Introduction	3
1.1	Objectives.....	3
1.2	References.....	3
2	Unit test case specification.....	3
2.1	Test case specification identifier.....	3
2.2	Test items	6
2.3	Input specifications.....	6
2.4	Output specifications.....	7
3	Environmental needs.....	7
4	Unit test summary report	7
4.1	Test summary report identifier.....	7
4.2	Evaluation.....	8

1 Introduction

1.1 Objectives

본 문서는 PTS - unit test를 수행한 결과에 대한 레포트 문서이다. Test 요소들에 대한 test case와 test 수행 결과에 대한 내용을 담고 있다.

1.2 References

T7_SRA_Ver5.0

T7_SDS_Ver3.0

T7_UTP_Ver1.0

2 Unit test case specification

2.1 Test case specification identifier

Test Case Identifier	Input Specification	Output Specification
PTS_UTC_211_000	StandBy==Enable / existInfo==F, inOut==F, trans==F, balance>=normal_fee	StandBy==Disable / Trigger -> GetOn_Pass
PTS_UTC_211_001	StandBy==Enable / existInfo==F, inOut==F, trans==F, balance<normal_fee	StandBy==Disable / Trigger -> GetOn_Deny
PTS_UTC_211_002	StandBy==Enable / existInfo==F, InOut==F, Trans==T, Balance>=MAX_BUS_FEE	StandBy==Disable / Trigger -> Transfer_Pass
PTS_UTC_211_003	StandBy==Enable / existInfo==F, InOut==F, Trans==T, Balance>=MAX_METRO_FEE	StandBy==Disable / Trigger -> Transfer_Pass
PTS_UTC_211_004	StandBy==Enable / existInfo==F, InOut==F, Trans==T, Balance<MAX_BUS_FEE	StandBy==Disable / Trigger -> Transfer_Deny
PTS_UTC_211_005	StandBy==Enable / existInfo==F, InOut==F, Trans==T, Balance<MAX_METRO_FEE	StandBy==Disable / Trigger -> Transfer_Deny
PTS_UTC_211_0006	StandBy==Enable / existInfo==T, SameID==T, Mot==T	StandBy==Disable / Trigger -> Bus_GetOff
PTS_UTC_211_0007	StandBy==Enable / existInfo==T, SameID==T, Mot==F	StandBy==Disable / Trigger -> Metro_GetOff

PTS.UTC_211_0008	StandBy==Enable / existInfo==T, SameID==F, Mot==T	StandBy==Disable / Trigger -> Bus_T_GetOff
PTS.UTC_211_0009	StandBy==Enable / existInfo==T, SameID==F, Mot==F	StandBy==Disable / Trigger -> Metro_T_GetOff
PTS.UTC_211_0010	StandBy==Enable / existInfo==F, InOut==T, Mot==T, Balance>=NOMAL_FEE + MAX_BUS_FEE	StandBy==Disable / Trigger -> M2B_Pass
PTS.UTC_211_0011	StandBy==Enable / existInfo==F, InOut==T, Mot==T, Balance<NOMAL_FEE + MAX_BUS_FEE	StandBy==Disable / Trigger -> M2B_Deny
PTS.UTC_211_0012	StandBy==Enable / existInfo==F, InOut==T, Mot==F, exID==F, Balance>=NOMAL_FEE + MAX_METRO_FEE	StandBy==Disable / Trigger -> M2M_Pass
PTS.UTC_211_0013	StandBy==Enable / existInfo==F, InOut==T, Mot==F, exID==F, Balance<NOMAL_FEE + MAX_METRO_FEE	StandBy==Disable / Trigger -> M2M_Deny
PTS.UTC_211_0014	StandBy==Enable / existInfo==F, InOut==T, Mot==F, exID==T, Balance>=NOMAL_FEE + MAX_METRO_FEE	StandBy==Disable / Trigger -> B2M_Pass
PTS.UTC_211_0015	StandBy==Enable / existInfo==F, InOut==T, Mot==F, exID==T, Balance<NOMAL_FEE + MAX_METRO_FEE	StandBy==Disable / Trigger -> B2M_Deny
PTS.UTC_213_0000	Trigger in / T_Load_Data	Balance-=NORMAL_FEE, Inout==True, Mot==True(or False)(Current값) / Card Write Command, Display Command, Sound Command, Send Command Payment data
PTS.UTC_214_0000	Trigger in / T_Load_Data	Display Command, Sound Command
PTS.UTC_215_0000	Trigger in / T_Load_Data.	Balance InOut==False

		Card Write Command, Display Command, Sound Command, Send Command, Payment data
PTS.UTC_216_0000	Trigger in / T_Load_Data / Payment History Data	Balance InOut==False Card Write Command, Display Command, Sound Command, Send Command, Payment data
PTS.UTC_217_0000	Trigger in / T_Load_Data	Balance-=(MAX_BUS_FEE or MAX_METRO_FEE, Inout==True, Mot==True(or False)(Current값) / Card Write Command, Display Command, Sound Command, Send Command Payment data
PTS.UTC_218_0000	Trigger in / T_Load_Data	Display Command, Sound Command
PTS.UTC_219_0000	Trigger in / T_Load_Data	Balance InOut==False Card Write Command, Display Command, Sound Command, Send Command, Payment data
PTS.UTC_2110_0000	Trigger in / T_Load_Data / Payment History Data	Balance InOut==False Card Write Command, Display Command, Sound Command, Send Command, Payment data
PTS.UTC_2111_0000	Trigger in / T_Load_Data	Balance-=(NOMAL_FEE

		+MAX_BUS_FEE), Inout==True, Mot==True(or False)(Current값) / Card Write Command, Display Command, Sound Command, Send Command Payment data
PTS.UTC_2112_0000	Trigger in / T_Load_Data	Display Command, Sound Command,
PTS.UTC_2113_0000	Trigger in / T_Load_Data	Balance-=(NOMAL_FEE +ADDITIONAL_METRO_FEE), InOut==True, Mot==True(or False)(Current값) / Card Write Command, Display Command, Sound Command, Send Command Payment data
PTS.UTC_2114_0000	Trigger in / T_Load_Data	Display Command, Sound Command,
PTS.UTC_2115_0000	Trigger in / T_Load_Data	Balance-=(NOMAL_FEE +MAX_METRO_FEE), Inout==True, Mot==True(or False)(Current값) / Card Write Command, Display Command, Sound Command, Send Command Payment data
PTS.UTC_2116_0000	Trigger in / T_Load_Data	Display Command, Sound Command,

2.2 Test items

2.1 참조

2.3 Input specifications

2.1 참조

2.4 Output specifications

2.1 참조

3 Environmental needs

eclipse ide for c/c++, Cygwin, CUnit lib

4 Unit test summary report

4.1 Test summary report identifier

Test Case Identifier	Result
PTS.UTC_211_000	Passed
PTS.UTC_211_001	Passed
PTS.UTC_211_002	Passed
PTS.UTC_211_003	Passed
PTS.UTC_211_004	Passed
PTS.UTC_211_005	Passed
PTS.UTC_211_0006	Passed
PTS.UTC_211_0007	Passed
PTS.UTC_211_0008	Passed
PTS.UTC_211_0009	Passed
PTS.UTC_211_0010	Passed
PTS.UTC_211_0011	Passed
PTS.UTC_211_0012	Passed
PTS.UTC_211_0013	Passed
PTS.UTC_211_0014	Passed
PTS.UTC_211_0015	Passed
PTS.UTC_213_0000	Failed
PTS.UTC_214_0000	Passed
PTS.UTC_215_0000	Failed
PTS.UTC_216_0000	Failed
PTS.UTC_217_0000	Failed
PTS.UTC_218_0000	Passed
PTS.UTC_219_0000	Failed
PTS.UTC_2110_0000	Passed
PTS.UTC_2111_0000	Failed
PTS.UTC_2112_0000	Passed

PTS.UTC_2113_0000	Failed
PTS.UTC_2114_0000	Passed
PTS.UTC_2115_0000	Failed
PTS.UTC_2116_0000	Passed

4.2 Evaluation

Total: 28

Passed: 20

Failed: 8

Test모드의 오류를 바탕으로 본 프로그램과 Test모드 두 가지의 오류를 수정해 나갈 예정

CUnit - A Unit testing framework for C - Version 2.1-2
<http://cunit.sourceforge.net/>

```
***** CUNIT CONSOLE - MAIN MENU *****  
(R)un (S)elect (L)ist (A)ctivate (F)ailures (O)ptions (H)elp (Q)uit  
Enter command: r
```

Running Suite : 2.1.1 Terminal Process Control

```
Running Test : PTS.UTC_211_0000  
Running Test : PTS.UTC_211_0001  
Running Test : PTS.UTC_211_0002  
Running Test : PTS.UTC_211_0003  
Running Test : PTS.UTC_211_0004  
Running Test : PTS.UTC_211_0005  
Running Test : PTS.UTC_211_0006  
Running Test : PTS.UTC_211_0007  
Running Test : PTS.UTC_211_0008  
Running Test : PTS.UTC_211_0009  
Running Test : PTS.UTC_211_0010  
Running Test : PTS.UTC_211_0011  
Running Test : PTS.UTC_211_0012  
Running Test : PTS.UTC_211_0013  
Running Test : PTS.UTC_211_0014
```

Running Suite : 2.1.3 ~ 2.1.16 Process Testing

```
Running Test : PTS.UTC_213_0000  
Running Test : PTS.UTC_214_0000  
Running Test : PTS.UTC_215_0000  
Running Test : PTS.UTC_216_0000  
Running Test : PTS.UTC_217_0000  
Running Test : PTS.UTC_218_0000  
Running Test : PTS.UTC_219_0000  
Running Test : PTS.UTC_2111_0000  
Running Test : PTS.UTC_2112_0000  
Running Test : PTS.UTC_2113_0000  
Running Test : PTS.UTC_2114_0000  
Running Test : PTS.UTC_2115_0000  
Running Test : PTS.UTC_2116_0000
```

Run Summary: Type Total Ran Passed Failed Inactive

```

Run Summary:  Type Total  Ran Passed Failed Inactive
suites      2      2  n/a    0      0
tests      28     28   20     8      0
asserts    116    116   95    21     n/a

```

Elapsed time = 0.000 seconds

```

***** CUNIT CONSOLE - MAIN MENU *****
(R)un (S)elect (L)ist (A)ctivate (F)ailures (O)ptions (H)elp (Q)uit
Enter command: f

```

```

----- Test Run Failures -----
src_file:line# : (suite:test) : failure_condition
1. ../test.c:233 : (2.1.3 ~ 2.1.16 Process Testing : PTS_UTC_213_0000) : cid.mot=FALSE
2. ../test.c:250 : (2.1.3 ~ 2.1.16 Process Testing : PTS_UTC_215_0000) : cid.inOut=FALSE
3. ../test.c:262 : (2.1.3 ~ 2.1.16 Process Testing : PTS_UTC_216_0000) : cid.inOut=FALSE
4. ../test.c:263 : (2.1.3 ~ 2.1.16 Process Testing : PTS_UTC_216_0000) : cid.mot=FALSE
5. ../test.c:270 : (2.1.3 ~ 2.1.16 Process Testing : PTS_UTC_216_0000) : cid.inOut=FALSE
6. ../test.c:271 : (2.1.3 ~ 2.1.16 Process Testing : PTS_UTC_216_0000) : cid.mot=FALSE
7. ../test.c:286 : (2.1.3 ~ 2.1.16 Process Testing : PTS_UTC_217_0000) : strcmp(cid_terminalInfoFromCard,"7001_0001")
8. ../test.c:292 : (2.1.3 ~ 2.1.16 Process Testing : PTS_UTC_217_0000) : cid.mot=FALSE
9. ../test.c:294 : (2.1.3 ~ 2.1.16 Process Testing : PTS_UTC_217_0000) : strcmp(cid_terminalInfoFromCard,"5001_0001")
10. ../test.c:310 : (2.1.3 ~ 2.1.16 Process Testing : PTS_UTC_219_0000) : cid.inOut=FALSE
11. ../test.c:318 : (2.1.3 ~ 2.1.16 Process Testing : PTS_UTC_219_0000) : cid.inOut=FALSE
12. ../test.c:326 : (2.1.3 ~ 2.1.16 Process Testing : PTS_UTC_219_0000) : cid.inOut=FALSE
13. ../test.c:363 : (2.1.3 ~ 2.1.16 Process Testing : PTS_UTC_2111_0000) : strcmp(cid_terminalInfoFromCard,"7001_0001")
14. ../test.c:369 : (2.1.3 ~ 2.1.16 Process Testing : PTS_UTC_2111_0000) : cid.mot=FALSE
15. ../test.c:371 : (2.1.3 ~ 2.1.16 Process Testing : PTS_UTC_2111_0000) : strcmp(cid_terminalInfoFromCard,"7001_0001")
16. ../test.c:391 : (2.1.3 ~ 2.1.16 Process Testing : PTS_UTC_2113_0000) : strcmp(cid_terminalInfoFromCard,"7001_0001")
17. ../test.c:397 : (2.1.3 ~ 2.1.16 Process Testing : PTS_UTC_2113_0000) : cid.mot=FALSE
18. ../test.c:399 : (2.1.3 ~ 2.1.16 Process Testing : PTS_UTC_2113_0000) : strcmp(cid_terminalInfoFromCard,"7001_0001")
19. ../test.c:419 : (2.1.3 ~ 2.1.16 Process Testing : PTS_UTC_2115_0000) : strcmp(cid_terminalInfoFromCard,"5001_0001")
20. ../test.c:425 : (2.1.3 ~ 2.1.16 Process Testing : PTS_UTC_2115_0000) : cid.mot=FALSE
21. ../test.c:427 : (2.1.3 ~ 2.1.16 Process Testing : PTS_UTC_2115_0000) : strcmp(cid_terminalInfoFromCard,"5001_0001")
-----
Total Number of Failures : 21

```

```

***** CUNIT CONSOLE - MAIN MENU *****

```