

Unit Test Report for NPS System

- Test Cases Specification
- Test Summary Report

Project Team
Class A Team3

Latest update on:
2015-11-17

Team Information
201411258 강태준
201411265 김서우
201411315 정유환
201411321 홍유리
201411256 강유민

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	3
2.3	Input specifications.....	28
2.4	Output specifications.....	28
3	Environmental needs.....	28
4	Unit test summary report	29
4.1	Test summary report identifier.....	29
4.2	Evaluation.....	31

1 Introduction

1.1 Objectives

본 문서는 2015년 건국대학교 컴퓨터 공학과의 소프트웨어 공학 개론 강의의 실습과제를 설명한다. 실습과제는 네트워크 프린터 시스템(NPS : Network Printer System)을 소프트웨어만을 이용한 가상의 시스템으로 구현하는 것이다.

1.2 References

T3_2015_SRA_4.0

T3_2015_SDS_2.0

T3_2015_UTP_2.0

2 Unit test case specification

2.1 Test case specification identifier

Identifier	Feature	Valid / Invalid Value;
T3_NPS_11_000	1.1 Input Interface	ID = user, data = sing.txt, mode_input = p
T3_NPS_11_001	1.1 Input Interface	ID = user, data = 1000 mode_input = i
T3_NPS_11_002	1.1 Input Interface	ID = user, data = 100, mode_input = a
T3_NPS_11_003	1.1 Input Interface	ID = user, data = user2, mode_input = j
T3_NPS_11_004	1.1 Input Interface	ID = user, data = user2, mode_input = d

T3_NPS_11_005	1.1 Input Interface	ID = admin, data = sing.txt, mode_input = p
T3_NPS_11_006	1.1 Input Interface	ID = admin, data = 1000, mode_input = i
T3_NPS_11_007	1.1 Input Interface	ID = admin, data = 100, mode_input = a
T3_NPS_11_008	1.1 Input Interface	ID = admin, data = user2, mode_input = j
T3_NPS_11_009	1.1 Input Interface	ID = admin, data = user2, mode_input = d
T3_NPS_11_010	1.1 Input Interface	ID = NULL, data = sing.txt, mode_input = p
T3_NPS_12_000	1.2 Input Converter	ID = user, command = p, data = sing.txt
T3_NPS_12_001	1.2 Input Converter	ID = user, command = s, data = sing.txt
T3_NPS_12_002	1.2 Input Converter	ID = user, command = a, data = 100
T3_NPS_12_003	1.2 Input Converter	ID = user, command = i, data = 1000
T3_NPS_12_004	1.2 Input Converter	ID = user, command = j, data = user2
T3_NPS_12_005	1.2 Input Converter	ID = user, command = d, data = user2
T3_NPS_12_006	1.2 Input Converter	ID = user, command = h, data =

		userlist.txt
T3_NPS_12_007	1.2 Input Converter	ID = admin, command = p, data = sing.txt
T3_NPS_12_008	1.2 Input Converter	ID = admin, command = s, data = sing.txt
T3_NPS_12_009	1.2 Input Converter	ID = admin, command = a, data = 100
T3_NPS_12_010	1.2 Input Converter	ID = admin, command = i, data = 1000
T3_NPS_12_011	1.2 Input Converter	ID = admin, command = j, data = user2
T3_NPS_12_012	1.2 Input Converter	ID = admin, command = d, data = user2
T3_NPS_12_013	1.2 Input Converter	ID = admin, command = h, data = userlist.txt
T3_NPS_12_014	1.2 Input Converter	ID = NULL, command = p, data = sing.txt
T3_NPS_211_000	2.1.1 System Controller	c_ID = user, command = 1, data = sing.txt
T3_NPS_211_001	2.1.1 System Controller	c_ID = user, command = 2, data = sing.txt
T3_NPS_211_002	2.1.1 System Controller	c_ID = user, command = 3, data = 1000
T3_NPS_211_003	2.1.1 System Controller	c_ID = user, command = 4, data = 100

T3_NPS_211_004	2.1.1 System Controller	c_ID = user, command = 5, data = user2
T3_NPS_211_005	2.1.1 System Controller	c_ID = user, command = 6, data = user2
T3_NPS_211_006	2.1.1 System Controller	c_ID = user, command = 7, data = userlist.txt
T3_NPS_211_007	2.1.1 System Controller	c_ID = admin, command = 1, data = sing.txt
T3_NPS_211_008	2.1.1 System Controller	c_ID = admin, command = 2, data = sing.txt
T3_NPS_211_009	2.1.1 System Controller	c_ID = admin, command = 3, data = 1000
T3_NPS_211_010	2.1.1 System Controller	c_ID = admin, command = 4, data = 100
T3_NPS_211_011	2.1.1 System Controller	c_ID = admin, command = 5, data = user2
T3_NPS_211_012	2.1.1 System Controller	c_ID = admin, command = 6, data = user2
T3_NPS_211_013	2.1.1 System Controller	c_ID = admin, command = 7, data = userlist.txt
T3_NPS_211_014	2.1.1 System Controller	c_ID = NULL, command = 1, data = sing.txt
T3_NPS_2121_000	2.1.2.1 Print Calculator	c (c_ID = user, file = sing.txt, command = 0) p (PI = 1000, PP = 10, VF = 1)

T3_NPS_2121_001	2.1.2.1 Print Calculator	c (c_ID = user, file = sing.txt, command = 1) p (PI = 1000, PP = 10, VF = 0)
T3_NPS_2121_002	2.1.2.1 Print Calculator	c (c_ID = user, file = sing.txt, command = 1) p (PI = 1000, PP = 10, VF = 1)
T3_NPS_2121_003	2.1.2.1 Print Calculator	c (c_ID = admin, file = sing.txt, command = 1) p (PI = 1000, PP = 10, VF = 0)
T3_NPS_2121_004	2.1.2.1 Print Calculator	c (c_ID = admin, file = sing.txt, command = 1) p (PI = 1000, PP = 10, VF = 1)
T3_NPS_2122_000	2.1.2.2 Print Controller	command = 1 PT (ID = user, file = sing.txt, calculated_ink = 300, calculated_paper = 30, verified_file = 1) PS (print_current_state = 0, current_ink = 3000, current_paper = 100, temp_ink = 3000, temp_paper = 100, wait_num = 0)
T3_NPS_2122_001	2.1.2.2 Print Controller	command = 2 PT (ID = admin, file = sing.txt, calculated_ink = 300, calculated_paper = 30,

		<p>verified_file = 1)</p> <p>PS (print_current_state = 0, current_ink = 3000, current_paper = 100, temp_ink = 3000, temp_paper = 100, wait_num = 0)</p>
T3_NPS_2123_000	2.1.2.3 Print	<p>command = 1</p> <p>PT (ID = user, file = sing.txt, calculated_ink = 300, calculated_paper = 30, verified_file = 1)</p> <p>PS (print_current_state = 0, current_ink = 3000, current_paper = 100, temp_ink = 3000, temp_paper = 100, wait_num = 0)</p>
T3_NPS_2123_001	2.1.2.3 Print	<p>command = 1</p> <p>PT (ID = admin, file = sing.txt, calculated_ink = 300, calculated_paper = 30, verified_file = 1)</p> <p>PS (print_current_state = 0, current_ink = 3000, current_paper = 100, temp_ink = 3000, temp_paper = 100, wait_num = 0)</p>

T3_NPS_2124_000	2.1.2.4 Stop	<p>command = 2</p> <p>PT (ID = user, file = sing.txt, calculated_ink = 300, calculated_paper = 30, verified_file = 1)</p> <p>PS (print_current_state = 1, current_ink = 3000, current_paper = 100, temp_ink = 3000, temp_paper = 100, wait_num = 0)</p>
T3_NPS_2124_001	2.1.2.4 Stop	<p>command = 2</p> <p>PT (ID = admin, file = sing.txt, calculated_ink = 300, calculated_paper = 30, verified_file = 1)</p> <p>PS (print_current_state = 1, current_ink = 3000, current_paper = 100, temp_ink = 3000, temp_paper = 100, wait_num = 0)</p>
T3_NPS_2126_000	2.1.2.6 Error	<p>Command = 1</p> <p>PT (ID = user, file = sing.txt, calculated_ink = 300, calculated_paper = 30, verified_file = 1)</p> <p>PS (print_current_state = 0, current_ink = 3000, current_paper = 100, temp_ink = 3000,</p>

		temp_paper = 100, wait_num = 0)
T3_NPS_2126_001	2.1.2.6 Error	<p>Command = 1</p> <p>PT (ID = user, file = sing.txt, calculated_ink = 300, calculated_paper = 30, verified_file = 1)</p> <p>PS (print_current_state = 1, current_ink = 3000, current_paper = 100, temp_ink = 3000, temp_paper = 100, wait_num = 5)</p>
T3_NPS_2126_002	2.1.2.6 Error	<p>Command = 1</p> <p>PT (ID = user, file = sing.txt, calculated_ink = 300, calculated_paper = 30, verified_file = 0)</p> <p>PS (print_current_state = 2, current_ink = 3000, current_paper = 100, temp_ink = 3000, temp_paper = 100, wait_num = 5)</p>
T3_NPS_2126_003	2.1.2.6 Error	<p>Command = 1</p> <p>PT (ID = user, file = sing.txt, calculated_ink = 300, calculated_paper = 30, verified_file = 0</p> <p>PS (print_current_state = 0, current_ink = 3000, current_paper</p>

		= 100, temp_ink = 3000, temp_paper = 100, wait_num = 0)
T3_NPS_2126_004	2.1.2.6 Error	Command = 1 PT (ID = user, file = sing.txt, calculated_ink = 300, calculated_paper = 30, verified_file = 1) PS (print_current_state = 0, current_ink = 200, current_paper = 100, temp_ink = 200, temp_paper = 100, wait_num = 0)
T3_NPS_2126_005	2.1.2.6 Error	Command = 1 PT (ID = user, file = sing.txt, calculated_ink = 300, calculated_paper = 30, verified_file = 1) PS (print_current_state = 0, current_ink = 3000, current_paper = 10, temp_ink = 3000, temp_paper = 10, wait_num = 0)
T3_NPS_2126_006	2.1.2.6 Error	Command = 2 PT (ID = user, file = sing.txt, calculated_ink = 300, calculated_paper = 30, verified_file = 1) PS (print_current_state = 2, current_ink = 3000, current_paper

		= 100, temp_ink = 3000, temp_paper = 100, wait_num = 0)
T3_NPS_2126_007	2.1.2.6 Error	command = 3 RT (100) PS (print_current_state = 1, current_ink = 3000, current_paper = 0, temp_ink = 3000, temp_paper = 0, wait_num = 0)
T3_NPS_2126_008	2.1.2.6 Error	command = 3 RT (100) PS (print_current_state = 0, current_ink = 3000, current_paper = 100, temp_ink = 3000, temp_paper = 100, wait_num = 0)
T3_NPS_2126_009	2.1.2.6 Error	command = 4 RT (3000) PS (print_current_state = 0, current_ink = 3000, current_paper = 100, temp_ink = 3000, temp_paper = 100, wait_num = 0)
T3_NPS_2126_010	2.1.2.6 Error	command = 5 UT (ID = admin, EI = 0) PS (print_current_state = 1, current_ink = 3000, current_paper = 100, temp_ink = 3000,

		temp_paper = 100, wait_num = 0)
T3_NPS_2126_011	2.1.2.6 Error	command = 5 UT (ID = admin, EI = 1) PS (print_current_state = 0, current_ink = 3000, current_paper = 100, temp_ink = 3000, temp_paper = 100, wait_num = 0)
T3_NPS_2126_012	2.1.2.6 Error	command = 6 UT (ID = admin2, EI = 0) PS (print_current_state = 0, current_ink = 3000, current_paper = 100, temp_ink = 3000, temp_paper = 100, wait_num = 0)
T3_NPS_2131_000	2.1.3.1 Admin Calculator	c (c_ID = user, file = sing.txt, ID = NULL, command = 3, r_ink = 100, r_paper = 1000)
T3_NPS_2131_001	2.1.3.1 Admin Calculator	c (c_ID = user, file = sing.txt, ID = NULL, command = 4, r_ink = 100, r_paper = 1000)
T3_NPS_2131_002	2.1.3.1 Admin Calculator	c (c_ID = admin, file = sing.txt, ID = NULL, command = 3, r_ink = 100, r_paper = 1000)
T3_NPS_2131_003	2.1.3.1 Admin Calculator	c (c_ID = admin, file = sing.txt, ID = NULL, command = 4, r_ink

		= 100, r_paper = 1000)
T3_NPS_2132_000	2.1.3.2 Refill Controller	Command = 3, amount = 100
T3_NPS_2132_001	2.1.3.2 Refill Controller	Command = 3, amount = 101
T3_NPS_2132_002	2.1.3.2 Refill Controller	Command = 4, amount = 1000
T3_NPS_2132_003	2.1.3.2 Refill Controller	Command = 4, amount = 1001
T3_NPS_2134_000	2.1.3.4 Paper Refill	Amount > Max
T3_NPS_2134_001	2.1.3.4 Paper Refill	Amount = Max
T3_NPS_2134_002	2.1.3.4 Paper Refill	0 < Amount < Max
T3_NPS_2134_003	2.1.3.4 Paper Refill	Amount < 0
T3_NPS_2135_000	2.1.3.5 Ink Refill	Amount > Max
T3_NPS_2135_001	2.1.3.5 Ink Refill	Amount = Max
T3_NPS_2135_002	2.1.3.5 Ink Refill	0 < Amount < Max
T3_NPS_2135_003	2.1.3.5 Ink Refill	Amount < 0
T3_NPS_2136_000	2.1.3.6 Join	ID = NULL , File = userlist.txt
T3_NPS_2136_001	2.1.3.6 Join	ID = user , File = userlist.txt
T3_NPS_2136_002	2.1.3.6 Join	ID = admin , File = userlist.txt
T3_NPS_2137_000	2.1.3.7 Delete	ID = NULL , File = userlist.txt

T3_NPS_2137_001	2.1.3.7 Delete	ID = admin , File = userlist.txt
T3_NPS_2137_002	2.1.3.7 Delete	ID = user , File = userlist.txt
T3_NPS_22_000	2.2 Print Interface	WT (ID = user, file = sing.txt, paper = 10) PS (print_current_state = 0, current_ink = 3000, current_paper = 100, temp_ink = 3000, temp_paper = 100, wait_num = 0)
T3_NPS_22_001	2.2 Print Interface	WT (ID = admin, file = sing.txt, paper = 10) PS (print_current_state = 0, current_ink = 3000, current_paper = 100, temp_ink = 3000, temp_paper = 100, wait_num = 0)

2.2 Test items

Test Case Identifier	Input Specification	Output Specification
T3_NPS_11_000	ID = user, data = sing.txt, mode_input = p	Pass
T3_NPS_11_001	ID = user, data = 1000 mode_input = i	Pass
T3_NPS_11_002	ID = user, data = 100, mode_input = a	Pass

T3_NPS_11_003	ID = user, data = user2, mode_input = j	Pass
T3_NPS_11_004	ID = user, data = user2, mode_input = d	Pass
T3_NPS_11_005	ID = admin, data = sing.txt, mode_input = p	Pass
T3_NPS_11_006	ID = admin, data = 1000, mode_input = i	Pass
T3_NPS_11_007	ID = admin, data = 100, mode_input = a	Pass
T3_NPS_11_008	ID = admin, data = user2, mode_input = j	Pass
T3_NPS_11_009	ID = admin, data = user2, mode_input = d	Pass
T3_NPS_11_010	ID = NULL, data = sing.txt, mode_input = p	Fail
T3_NPS_12_000	ID = user, command = p, data = sing.txt	Pass
T3_NPS_12_001	ID = user, command = s, data = sing.txt	Pass
T3_NPS_12_002	ID = user, command = a, data = 100	Pass
T3_NPS_12_003	ID = user, command = i, data = 1000	Pass
T3_NPS_12_004	ID = user, command = j, data	Pass

	= user2	
T3_NPS_12_005	ID = user, command = d, data = user2	Pass
T3_NPS_12_006	ID = user, command = h, data = userlist.txt	Pass
T3_NPS_12_007	ID = admin, command = p, data = sing.txt	Pass
T3_NPS_12_008	ID = admin, command = s, data = sing.txt	Pass
T3_NPS_12_009	ID = admin, command = a, data = 100	Pass
T3_NPS_12_010	ID = admin, command = i, data = 1000	Pass
T3_NPS_12_011	ID = admin, command = j, data = user2	Pass
T3_NPS_12_012	ID = admin, command = d, data = user2	Pass
T3_NPS_12_013	ID = admin, command = h, data = userlist.txt	Pass
T3_NPS_12_014	ID = NULL, command = p, data = sing.txt	Pass
T3_NPS_211_000	c_ID = user, command = 1, data = sing.txt	Pass
T3_NPS_211_001	c_ID = user, command = 2, data = sing.txt	Pass

T3_NPS_211_002	c_ID = user, command = 3, data = 1000	Fail
T3_NPS_211_003	c_ID = user, command = 4, data = 100	Fail
T3_NPS_211_004	c_ID = user, command = 5, data = user2	Fail
T3_NPS_211_005	c_ID = user, command = 6, data = user2	Fail
T3_NPS_211_006	c_ID = user, command = 7, data = userlist.txt	Fail
T3_NPS_211_007	c_ID = admin, command = 1, data = sing.txt	Pass
T3_NPS_211_008	c_ID = admin, command = 2, data = sing.txt	Pass
T3_NPS_211_009	c_ID = admin, command = 3, data = 1000	Pass
T3_NPS_211_010	c_ID = admin, command = 4, data = 100	Pass
T3_NPS_211_011	c_ID = admin, command = 5, data = user2	Pass
T3_NPS_211_012	c_ID = admin, command = 6, data = user2	Pass
T3_NPS_211_013	c_ID = admin, command = 7, data = userlist.txt	Pass
T3_NPS_211_014	c_ID = NULL, command = 1, data = sing.txt	Fail

T3_NPS_2121_000	c (c_ID = user, file = sing.txt, command = 0) p (PI = 1000, PP = 10, VF = 1)	Fail
T3_NPS_2121_001	c (c_ID = user, file = sing.txt, command = 1) p (PI = 1000, PP = 10, VF = 0)	Fail
T3_NPS_2121_002	c (c_ID = user, file = sing.txt, command = 1) p (PI = 1000, PP = 10, VF = 1)	Pass
T3_NPS_2121_003	c (c_ID = admin, file = sing.txt, command = 1) p (PI = 1000, PP = 10, VF = 0)	Fail
T3_NPS_2121_004	c (c_ID = admin, file = sing.txt, command = 1) p (PI = 1000, PP = 10, VF = 1)	Pass
T3_NPS_2122_000	command = 1 PT (ID = user, file = sing.txt, calculated_ink = 300, calculated_paper = 30,	Pass

	<p>verified_file = 1)</p> <p>WT (ID = user, file = sing.txt, paper = 100)</p>	
T3_NPS_2122_001	<p>command = 2</p> <p>PT (ID = admin, file = sing.txt, calculated_ink = 300, calculated_paper = 30, verified_file = 1)</p> <p>WT (ID = admin, file = sing.txt, paper = 100)</p>	Pass
T3_NPS_2123_000	<p>command = 1</p> <p>PT (ID = user, file = sing.txt, calculated_ink = 300, calculated_paper = 30, verified_file = 1)</p> <p>PS (print_current_state = 0, current_ink = 3000, current_paper = 100, temp_ink = 3000, temp_paper = 100, wait_num = 0)</p>	Pass
T3_NPS_2123_001	<p>command = 1</p> <p>PT (ID = admin, file = sing.txt, calculated_ink = 300, calculated_paper = 30, verified_file = 1)</p> <p>PS (print_current_state = 0,</p>	Pass

	<pre>current_ink = 3000, current_paper = 100, temp_ink = 3000, temp_paper = 100, wait_num = 0)</pre>	
T3_NPS_2124_000	<pre>command = 2 PT (ID = user, file = sing.txt, calculated_ink = 300, calculated_paper = 30, verified_file = 1) PS (print_current_state = 1, current_ink = 3000, current_paper = 100, temp_ink = 3000, temp_paper = 100, wait_num = 0)</pre>	Pass
T3_NPS_2124_001	<pre>command = 2 PT (ID = admin, file = sing.txt, calculated_ink = 300, calculated_paper = 30, verified_file = 1) PS (print_current_state = 1, current_ink = 3000, current_paper = 100, temp_ink = 3000, temp_paper = 100, wait_num = 0)</pre>	Pass

T3_NPS_2126_000	<p>Command = 1</p> <p>PT (ID = user, file = sing.txt, calculated_ink = 300, calculated_paper = 30, verified_file = 1)</p> <p>PS (print_current_state = 0, current_ink = 3000, current_paper = 100, temp_ink = 3000, temp_paper = 100, wait_num = 0)</p>	Pass
T3_NPS_2126_001	<p>Command = 1</p> <p>PT (ID = user, file = sing.txt, calculated_ink = 300, calculated_paper = 30, verified_file = 1)</p> <p>PS (print_current_state = 1, current_ink = 3000, current_paper = 100, temp_ink = 3000, temp_paper = 100, wait_num = 5)</p>	Pass
T3_NPS_2126_002	<p>Command = 1</p> <p>PT (ID = user, file = sing.txt, calculated_ink = 300, calculated_paper = 30, verified_file = 0)</p> <p>PS (print_current_state = 2, current_ink = 3000,</p>	Fail

	<p>current_paper = 100, temp_ink = 3000, temp_paper = 100, wait_num = 5)</p>	
T3_NPS_2126_003	<p>Command = 1</p> <p>PT (ID = user, file = sing.txt, calculated_ink = 300, calculated_paper = 30, verified_file = 0</p> <p>PS (print_current_state = 0, current_ink = 3000, current_paper = 100, temp_ink = 3000, temp_paper = 100, wait_num = 0)</p>	Fail
T3_NPS_2126_004	<p>Command = 1</p> <p>PT (ID = user, file = sing.txt, calculated_ink = 300, calculated_paper = 30, verified_file = 1)</p> <p>PS (print_current_state = 0, current_ink = 200, current_paper = 100, temp_ink = 200, temp_paper = 100, wait_num = 0)</p>	Fail
T3_NPS_2126_005	<p>Command = 1</p> <p>PT (ID = user, file = sing.txt, calculated_ink = 300, calculated_paper = 30,</p>	Fail

	<p>verified_file = 1)</p> <p>PS (print_current_state = 0, current_ink = 3000, current_paper = 10, temp_ink = 3000, temp_paper = 10, wait_num = 0)</p>	
T3_NPS_2126_006	<p>Command = 2</p> <p>PT (ID = user, file = sing.txt, calculated_ink = 300, calculated_paper = 30, verified_file = 1)</p> <p>PS (print_current_state = 2, current_ink = 3000, current_paper = 100, temp_ink = 3000, temp_paper = 100, wait_num = 0)</p>	Pass
T3_NPS_2126_007	<p>command = 3</p> <p>RT (100)</p> <p>PS (print_current_state = 1, current_ink = 3000, current_paper = 0, temp_ink = 3000, temp_paper = 0, wait_num = 0)</p>	Pass
T3_NPS_2126_008	<p>command = 3</p> <p>RT (100)</p> <p>PS (print_current_state = 0, current_ink = 3000, current_paper = 100,</p>	Pass

	temp_ink = 3000, temp_paper = 100, wait_num = 0)	
T3_NPS_2126_009	command = 4 RT (3000) PS (print_current_state = 0, current_ink = 3000, current_paper = 100, temp_ink = 3000, temp_paper = 100, wait_num = 0)	Fail
T3_NPS_2126_010	command = 5 UT (ID = admin, EI = 0) PS (print_current_state = 1, current_ink = 3000, current_paper = 100, temp_ink = 3000, temp_paper = 100, wait_num = 0)	Pass
T3_NPS_2126_011	command = 5 UT (ID = admin, EI = 1) PS (print_current_state = 0, current_ink = 3000, current_paper = 100, temp_ink = 3000, temp_paper = 100, wait_num = 0)	Pass
T3_NPS_2126_012	command = 6	Pass

	UT (ID = admin2, EI = 0) PS (print_current_state = 0, current_ink = 3000, current_paper = 100, temp_ink = 3000, temp_paper = 100, wait_num = 0)	
T3_NPS_2131_000	c (c_ID = user, file = sing.txt, ID = NULL, command = 3, r_ink = 100, r_paper = 1000)	Pass
T3_NPS_2131_001	c (c_ID = user, file = sing.txt, ID = NULL, command = 4, r_ink = 100, r_paper = 1000)	Pass
T3_NPS_2131_002	c (c_ID = admin, file = sing.txt, ID = NULL, command = 3, r_ink = 100, r_paper = 1000)	Pass
T3_NPS_2131_003	c (c_ID = admin, file = sing.txt, ID = NULL, command = 4, r_ink = 100, r_paper = 1000)	Pass
T3_NPS_2132_000	Command = 3, amount = 100	Pass
T3_NPS_2132_001	Command = 3, amount = 101	Fail
T3_NPS_2132_002	Command = 4, amount =	pass

	1000	
T3_NPS_2132_003	Command = 4, amount = 1001	Fail
T3_NPS_2134_000	Amount > Max	Fail
T3_NPS_2134_001	Amount = Max	Fail
T3_NPS_2134_002	0 < Amount < Max	Pass
T3_NPS_2134_003	Amount < 0	Fail
T3_NPS_2135_000	Amount > Max	Fail
T3_NPS_2135_001	Amount = Max	Fail
T3_NPS_2135_002	0 < Amount < Max	Pass
T3_NPS_2135_003	Amount < 0	fail
T3_NPS_2136_000	ID = NULL , File = userlist.txt	Fail
T3_NPS_2136_001	ID = user , File = userlist.txt	Pass
T3_NPS_2136_002	ID = admin , File = userlist.txt	Pass
T3_NPS_2137_000	ID = NULL , File = userlist.txt	Fail
T3_NPS_2137_001	ID = admin , File = userlist.txt	Pass
T3_NPS_2137_002	ID = user , File = userlist.txt	Pass

T3_NPS_22_000	WT (ID = user, file = sing.txt, paper = 10) PS (print_current_state = 0, current_ink = 3000, current_paper = 100, temp_ink = 3000, temp_paper = 100, wait_num = 0)	Pass
T3_NPS_22_001	WT (ID = admin, file = sing.txt, paper = 10) PS (print_current_state = 0, current_ink = 3000, current_paper = 100, temp_ink = 3000, temp_paper = 100, wait_num = 0)	Pass

2.3 Input specifications

Test case specification identifier 참조

2.4 Output specifications

Test Items 참조

3 Environmental needs

NPS의 unit test를 위한 환경적 요구사항은 다음과 같다.

(1) IDE : c9 io

(2) Cygwin (64bit)

4 Unit test summary report

4.1 Test summary report identifier

T3_NPS_11_000	Pass
T3_NPS_11_001	Pass
T3_NPS_11_002	Pass
T3_NPS_11_003	Pass
T3_NPS_11_004	Pass
T3_NPS_11_005	Pass
T3_NPS_11_006	Pass
T3_NPS_11_007	Pass
T3_NPS_11_008	Pass
T3_NPS_11_009	Pass
T3_NPS_11_010	Fail
T3_NPS_12_000	Pass
T3_NPS_12_001	Pass
T3_NPS_12_002	Pass
T3_NPS_12_003	Pass
T3_NPS_12_004	Pass
T3_NPS_12_005	Pass
T3_NPS_12_006	Pass
T3_NPS_12_007	Pass
T3_NPS_12_008	Pass
T3_NPS_12_009	Pass
T3_NPS_12_010	Pass
T3_NPS_12_011	Pass
T3_NPS_12_012	Pass
T3_NPS_12_013	Pass
T3_NPS_12_014	Pass
T3_NPS_211_000	Pass
T3_NPS_211_001	Pass
T3_NPS_211_002	Fail
T3_NPS_211_003	Fail

T3_NPS_211_004	Fail
T3_NPS_211_005	Fail
T3_NPS_211_006	Fail
T3_NPS_211_007	Pass
T3_NPS_211_008	Pass
T3_NPS_211_009	Pass
T3_NPS_211_010	Pass
T3_NPS_211_011	Pass
T3_NPS_211_012	Pass
T3_NPS_211_013	Pass
T3_NPS_211_014	Fail
T3_NPS_2121_000	Fail
T3_NPS_2121_001	Fail
T3_NPS_2121_002	Pass
T3_NPS_2121_003	Fail
T3_NPS_2121_004	Pass
T3_NPS_2122_000	Pass
T3_NPS_2122_001	Pass
T3_NPS_2123_000	Pass
T3_NPS_2123_001	Pass
T3_NPS_2124_000	Pass
T3_NPS_2124_001	Pass
T3_NPS_2126_000	Pass
T3_NPS_2126_001	Pass
T3_NPS_2126_002	Pass
T3_NPS_2126_003	Pass
T3_NPS_2126_004	Pass
T3_NPS_2126_005	Pass
T3_NPS_2126_006	Pass
T3_NPS_2126_007	Pass
T3_NPS_2126_008	Pass
T3_NPS_2126_009	Fail
T3_NPS_2126_010	Pass

T3_NPS_2126_011	Pass
T3_NPS_2126_012	Pass
T3_NPS_2131_000	Pass
T3_NPS_2131_001	Pass
T3_NPS_2131_002	Pass
T3_NPS_2131_003	Pass
T3_NPS_2132_000	Pass
T3_NPS_2132_001	Fail
T3_NPS_2132_002	Pass
T3_NPS_2132_003	Fail
T3_NPS_2134_000	Fail
T3_NPS_2134_001	Fail
T3_NPS_2134_002	Pass
T3_NPS_2134_003	Fail
T3_NPS_2135_000	Fail
T3_NPS_2135_001	Fail
T3_NPS_2135_002	Pass
T3_NPS_2135_003	Fail
T3_NPS_2136_000	Fail
T3_NPS_2136_001	Fail
T3_NPS_2136_002	Fail
T3_NPS_2137_000	Fail
T3_NPS_2137_001	Pass
T3_NPS_2137_002	Pass
T3_NPS_22_000	Pass
T3_NPS_22_001	Pass

4.2 Evaluation

Total Test Case : 87개

Error: 23 개

Passed : 64 개