

# Test Case Scenarios & Test Cases

## Part 1: Source Station Initialization

### Scenarios

Scenario Name	Starting Flow	Alternative flow
S1 - Successful Source Station Initialization	Basic flow	
S2 - Incorrect Format	Basic flow	A1.a
S3 - Input Incomplete	Basic Flow	A2.a

### Test Cases

Test case ID	Test case Name	Scenario	Delay time	Number of bins	Number of packages	Destinations of packages	Expected Result
TC1	Source Station Initialization	1	V	V	V	V	
TC2	Incorrect Format	2	(string)	V	V	V	
TC3	Input Incomplete	3	V	V	V	(Incomplete)	

## Test Case Values

Test case ID	Test case Name	Scenario	Delay time	Number of bins	Number of packages	Destinations of packages	Expected Result
TC1	Source Station Initialization	1	10	2	3	package0 bin0 package1 bin1 package2 bin1	The system returns the expected timeline of packages sent.
TC2	Incorrect Format	2	'test case'	2	3	package0 bin0 package1 bin1 package2 bin1	A notification will urge the user to input according to the system format
TC3	Input Incomplete	3	10	2	3	package0 bin0 package1 bin1 package2	a notification will urge the user to enter the complete information again

## Part 2: Package delivery(set switch)

### Scenarios

Scenario Name	Starting Flow	Alternative Flows
S4 - Successful Package Delivery	Package delivery (set switch) Basic Flow	
S5 - Lack of Information when Delivery	Package delivery (set switch) Basic Flow	Package delivery (set switch) Alternative Flow 1

### Test Cases

Test case ID	Test case Name	Scenario	number of bins	number of package	package id and its destination	Expected Result
TC4	Successful package delivery	4	V	V	V	The system shows it is in process of delivering the packages and shows the switches being set in real time.
TC5	Lack of Information when Delivery	5	V	V	Incomplete	The system sent an error message to the users to ask input complete information.

### Test Case Values

Test case ID	Test case Name	Scenario	number of bins	number of packages	package id and its destination	Expected Result
TC4	Successful package	4	4	2	package0 bin0 package1 bin1	The system shows it is in process of delivering

	delivery					the packages and shows the switches being set in real time.
TC5	Lack of Information when Delivery	5	4	2	package0 bin0 package1	The system sent an error message to the users to ask input complete information.

## Part 3: Signal Event (Delivery Error Report)

### Scenarios

Scenario Name	Starting Flow	Alternate
S6 - Successful Signal Event (Delivery Error Report)	Signal Event (Delivery Error Report) Basic Flow	
S7 - Missing Information Report	Signal Event (Delivery Error Report) Basic Flow	Signal Event (Delivery Error Report) Alternative Flow 1

### Test Cases

Test case ID	Test case Name	Scenario	the number of packages	package id and its destination	bin and received packages	Expected Result
TC6	Successful record delivery error	6	V	V	V	The user can know which package arrived at the wrong

						destination.
TC7	Lack of Information when show error report	7	V	I	I	The system sent an error message to the users to ask input complete information.

## Test Case Values

Test case ID	Test case Name	Scenario	the number of packages	package id and its destination	bin and received packages	Expected Result
TC6	Successful record delivery error	6	4	[package 0 bin0]	[package0 bin2]	The user can know which package arrived at the wrong destination.
TC7	Lack of Information when show error report	7	4	I	I	The system sent an error message to the users to ask input complete information.

V: Valid

I: Invalid

N/A: don't use