## **Test cases Document for Backend testing – Iteration 4**

Extended System test cases of "Test Cases\_reviewed.pdf"

Date: 20.7.2016

Last modifications: 22.6.2016

Performed by mzeen

Version: 0.2 in development, on commit 449e3b5

Tests marked with *Redone:* Redone after implementation of temporary work-around to comply with interface documentation

Performed by ricarda42

Date 26.6.2016

Version: commit b07e6de in branch developmentIt3

System test cases extended for iteration 4; redone tests from iteration 3 also to be tested with cleaned-up code

Sr.no	Use Case	Function Being Tested	Initial System State	Input	Expected Output	Test execution documentation
1	IC_C1	SF_S3: Send list of stops	Stop table exists in database	./stops	List of stops with stopId, stop name, line passing through the stops, location of the stop, bus schedule of the stop is displaying. Schedule contains line name, lineId, stopId, arriving time and timestamp.	Passed
2	IC_C2	SF_S5: Send properties of bus			Not needed	
3		SF_S6: Send GPS- Data	GPS data was sent to database	./busses/{busId}/	Current GPS Data coordinates with timestamp	Passed
4	IC_C3	SF_S6: Send GPS-			See above	

		Data				
5	IC_B1	SF_S1: Send list of lines		./lines	List of Lines with properties lineld, name, routeld, timestamp and busses running on that specific line	Passed
6		SF_S2: Send list of busses	Bus table exists in database	./busses	List of all busses with their busld, number plate, color, picture and the line they serve	Passed
7		SF_S4: Send list of routes	Route table exists in database	./routes	List of all routes with routeld, route coordinates in geojson format and timestamp	Passed
8		SF_S7: Store bus and line	Bus and line tables exist in database	./updateBusStatus  Method: POST Content type: application/json Content: { "lineId":number, "busId":number }	Result status 200, Bus and line information stored	Passed; tested with lineId = 3, busId = 2, with initially bus 2 on line 1. Output of post is 200, calling ./lines reveals that bus 2 is now on line 3.
9	IC_B2	SF_S13: Store number of available seats (see No. 12 – identical interface)		./realTimeData  Method:POST Content type: application/json Content: {     "busId":number,     "position": { "type": "Point", "coordinates": [double,     double]},     "takenSeats":     number     "timestamp": timeStamp }	Result status 200; GPS data and taken seats stored	Passed
10	IC_B3	SF_S4: Send list of			See above	

		routes				
11	IC_B4	SF_S3: Send list of stops			See above	
12	-	SF_S8: Store GPS data	Bus table exists in database	./realTimeData  Method: POST Content type: application/json Content: {   "busId":number,   "position": { "type": "Point", "coordinates": [double,   double]},   "timestamp": timeStamp }	Result status 200, GPS Data of bus is stored, timestamp not changed	Passed; With busId = 1, coordinates [15.0, - 3.4] and timeStamp = 1098692636000 the output of POST is 200, calling ./busses/1 reveals that coordinates have been changed to [15.0, -3.4]. The timeStamp remains 1098692634000.
13	-	SF_S9: Send latest timestamp	Line, bus, route and stops tables exist in database	./update	Last timestamps for bus, route, line and stops	Passed
14	IC_B5	SF_S10: Notification of custom stop request  Post custom stop request	CitizenApp sends new Custom Stop Request	./customStops  Method: POST Content type: application/json Content: {     "lineId":number,     "location": { "type": "Point", "coordinates": [double ,     double] },     "numberOfPersons": number,     "deviceId":String,     "info": {	Result status 200; New custom stop with assigned requestld, lineld, pickUpTime, location, number of persons, deviceld, information of passenger included name, address, and assistance, status and timestamp	Passed

			}, "pickUpTime":Timestamp }		
15.1	Get custom stop requests ref. to line Valid 1	Request from CitizenApp with lineId stored where global status is 1. DriverApp requests customStops for given lineId and busId. The bus has not yet rejected the custom stop (i.e. busId not in rejectingBus list)	./customStops?lineId={lineId}&busId={busId}	Custom stop request included in output list	Passed Tested with lineId=1 and busId=1
15.2	Get custom stop requests ref. to line Invalid 1	Request from CitizenApp with lineId stored where global status is 1. DriverApp requests customStops for given lineId and busId. The bus has already rejected the custom stop (i.e. busId in rejectingBus list)	./customStops?lineId={lineId}&busId={busId}	Custom stop request not included in output list	Passed Tested with lineId=1 and busId=1
15.3	Get custom stop requests ref. to line Valid 2	Request from CitizenApp with lineId stored. DriverApp requests customStops for given lineId and busId. Global status is 2. The bus has accepted this custom stop (i.e. acceptingBus is	./customStops?lineId={lineId}&busId={busId}	Custom stop request included in output list.	Passed Tested with lineId=1 and busId=1

		busld).			
15.4	Get custom stop requests ref. to line Invalid 2	Request from CitizenApp with lineId stored. DriverApp requests customStops for given lineId and busId. Global status is 2. The bus has accepted this custom stop (busId is not acceptingBus)	./customStops?lineId={lineId}&busId={busId}	Custom stop request not included in output list.	Passed Tested with lineId=1 and busId=1
15.5	Get custom stop requests ref. to line Invalid 3	Request from CitizenApp with lineId stored. DriverApp requests customStops for given lineId and busId. All busses on this line rejected this custom stop, i.e. global status is 3.	./customStops?lineId={lineId}&busId={busId}	Custom stop not in output list	Passed Tested with lineId=1 and busId=1
15.6	Get custom stop requests ref. to line Invalid 4	Request from CitizenApp with lineId stored. DriverApp requests customStops for given lineId and busId. A bus accepted and completed this custom stop, i.e. global status is 4.	./customStops?lineId={lineId}&busId={busId}	Custom stop not in output list	Passed Tested with lineId=1 and busId=1
15.7	Get custom stop requests	Request from CitizenApp with lineId stored.	./customStops?lineId={lineId}&busId={busId}	Custom stop not in output list	Passed Tested with lineId=1 and

		ref. to line	DriverApp requests			busId=1
		Invalid 5	customStops for			
			given lineld and			
			busld. A bus			
			accepted this			
			custom stop, but			
			the citizen did not			
			show up, i.e. global			
			status is 5.			
15.8			Request from			
			CitizenApp with			
			lineId stored.			
			DriverApp requests			
		Get custom	customStops for			
		stop	given lineld and			Passed
	ref. to	requests	busld. This bus	1 /Cligtom>tong /lingid=/lingid(X,niigid=/niigid)	Custom stop is in	Tested with
		ref. to line	accepted this	., oddiomotopo : imota-(imota) dodota-(oddia)	output list	lineId=1 and
		Valid 3	custom stop, but			busId=1
			the citizen			
			canceled it, i.e.			
			global status is 6			
			and busld is			
			acceptingBus.			
15.9			Request from			
			CitizenApp with			
			lineld stored.			
			DriverApp requests			
		Get custom	customStops for			
		stop	given lineld and			Passed
		requests	busid. A bus	/toOtoOlivertel (Verstell Oberetell (besstell)	Custom stop is not in	Tested with
		ref. to line	different from this	./customStops?lineId={lineId}&busId={busId}	output list	lineId=1 and
	Invalid 6	bus accepted this			busId=1	
			custom stop, but			
			the citizen			
			canceled it, i.e.			
			global status is 6			
			and busld is not			
			acceptingBus.			

15.10	Get custom stop requests ref. to line Invalid 7	DriverApp requests pending customStops for given lineId and busId; no requests for this line	./customStops?lineId={lineId}&busId={busId}	Empty list	Passed Tested with lineId=1 and busId=1
15.11	Get custom stop requests ref. to line Invalid 6	DriverApp requests pending customStops for given lineld and busId; requests for that line have pickUpTime before current time	./customStops?lineId={lineId}&busId={busId}	Empty list	Passed Tested with lineId=1 and busId=1
16.1	SF_S11: Response to custom stop request  Update status of custom stop requests Valid 1	DriverApp of a given bus received custom stop requests for the given line. The driver accepts a custom stop with status pending.	./customStops/{requestId}  Method: POST Content type: application/json Content: {   "status":2,   "busId": number }	Result status 200; Status of given request set to 2, acceptingBus set to busId	Passed Result status 200 With status 2
16.2	Update status of custom stop requests Invalid 1	DriverApp of a given bus received custom stop requests for the given line. The driver accepts a custom stop where the status has already been changed.	./customStops/{requestId}  Method: POST Content type: application/json Content: {   "status":2,   "busId": number }	Result status 200; status of request unchanged	Passed Result status 200 With status 2

16.3	Update status of custom stop requests Valid 2	DriverApp of a given bus received custom stop requests for the given line. The driver rejects a custom stop with status pending. Not all busses on this line have already rejected this custom stop.	./customStops/{requestId}  Method: POST Content type: application/json Content: {   "status":3,   "busId": number }	Result status 200; status of request unchanged, busId added to list rejectingBus	Passed Result status 200 With status 3
16.4	Update status of custom stop requests Valid 3	DriverApp of a given bus received custom stop requests for the given line. The driver rejects a custom stop with status pending. All busses on this line have already rejected this custom stop.	./customStops/{requestId}  Method: POST Content type: application/json Content: { "status":3, "busId": number }	Result status 200; status of request set to 3, busId added to list rejectingBus	Passed Result status 200 With status 3
16.5	Update status of custom stop requests Valid 4	DriverApp of a given bus received custom stop requests for the given line. The driver rejects a custom stop where the status has already been changed.	./customStops/{requestId}  Method: POST Content type: application/json Content: { "status":3, "busId": number }	Result status 200; status of request unchanged, busId added to rejectingBus list	Passed Result status 200 With status 3
16.6	Update status of custom stop	DriverApp of a given bus received custom stop requests for the	./customStops/{requestId}  Method: POST Content type: application/json	Result status 200; status of request set to 4	Passed Result status 200 With status 4

	requests	given line.	Content:		
	Valid 5	The driver	{		
		accepted a custom	"status":4,		
		stop (i.e. status is 2	"busld": number		
		and acceptingBus	}		
		equals busld) and			
		now marks it as			
		complete.			
16.7		DriverApp of a			
		given bus received			
		custom stop			
		requests for the	./customStops/{requestId}		
	Update	given line.			
	status of	A driver different	Method: POST		
	custom	from this driver	Content type: application/json	Result status 200;	Passed
	stop	accepted a custom	Content:	status of request	Result status 200
	requests	stop (i.e. status is 2	{	unchanged	With status 4
	Invalid 2	and acceptingBus	"status":4,		
		is not equal to	"busld": number		
		busld) This bus	}		
		driver now marks			
		this custom stop as			
		complete.			
16.8		DriverApp of a			
		given bus received			
		custom stop			
		requests for the	./customStops/{requestId}		
	Update	given line.			
	status of	This driver	Method: POST		
	custom	accepted a custom	Content type: application/json	Result status 200;	Passed
	stop	stop but the status	Content:	status of request	Result status 200
	requests	was updated	{	unchanged	With status 4
	Invalid 3	further (i.e. status	"status":4,		
		is not 2 and	"busld": number		
		acceptingBus is	}		
		equal to busld).			
		This bus driver now			
		marks this custom			

		stop as complete.			
16.9	Update status of custom stop requests Invalid 4	DriverApp of a given bus received custom stop requests for the given line. The bus driver now marks a custom stop as complete he did not accept and where the status is not accepted.	./customStops/{requestId}  Method: POST Content type: application/json Content: { "status":4, "busId": number }	Result status 200; status of request unchanged	Passed Result status 200 With status 4
16.10	Update status of custom stop requests Valid 6	DriverApp received custom stop requests for the given line. The driver accepted a custom stop (i.e. status is 2 and acceptingBus equals busld) and now marks it as not shown up.	./customStops/{requestId}  Method: POST Content type: application/json Content: {   "status":5,   "busId": number }	Result status 200; status of request set to 5	Passed Result status 200 With status 5
16.11	Update status of custom stop requests Valid 7	DriverApp of a given bus received custom stop requests for the given line. The driver accepted a custom stop (i.e. status is 2 and acceptingBus equals busld) and now marks it as not shown up.	./customStops/{requestId}  Method: POST Content type: application/json Content: { "status":5, "busId": number }	Result status 200; status of request set to 5	Passed Result status 200 With status 5
16.12	Update status of	DriverApp of a given bus received	./customStops/{requestId}	Result status 200; status of request	Passed Result status 200

	custom stop requests Invalid 5	custom stop requests for the given line. A driver different from this driver accepted a custom stop (i.e. status is 2 and acceptingBus is not equal to busld) This bus driver now marks this custom stop as not shown up.	Method: POST Content type: application/json Content: { "status":5, "busld": number }	unchanged	With status 5
16.13	Update status of custom stop requests Invalid 6	DriverApp of a given bus received custom stop requests for the given line. This driver accepted a custom stop but the status was updated further (i.e. status is not 2 and acceptingBus is equal to busld). This bus driver now marks this custom stop as not shown up.	./customStops/{requestId}  Method: POST Content type: application/json Content: { "status":5, "busId": number }	Result status 200; status of request unchanged	Passed Result status 200 With status 5
16.14	Update status of custom stop requests Invalid 7	DriverApp of a given bus received custom stop requests for the given line. The bus driver now marks a custom stop as not shown	./customStops/{requestId}  Method: POST Content type: application/json Content: {   "status":5,   "busId": number	Result status 200; status of request unchanged	Passed Result status 200 With status 5

16.15	Update status of custom stop requests Valid 8	up he did not accept and where the status is not accepted.  DriverApp of a given bus received custom stop requests for the given line. The citizen cancels the custom stop.	./customStops/{requestId}  Method: POST Content type: application/json Content: {   "status":6,   "busId": number }	Result status 200; status of request set to 6	Passed Result status 200 With status 6
16.17	Update status of custom stop requests Valid 9	DriverApp of a given bus received custom stop requests for the given line. The citizen cancels the custom stop.	./customStops/{requestId}  Method: POST Content type: application/json Content: {   "status":6   "busId": number }	Result status 200; status of request set to 6	Passed Result status 200 With status 6
18.1	Get custom stop requests ref. to requestld and deviceld	CitizenApp has the requestId	./customStops?requestId={requestId}&deviceId={deviceId}	Custom stop request for the given requestld with all properties	Redone: Passed
18.2	Get custom stop requests ref. to requestld	CitizenApp has the requestId	./customStops?requestId={requestId}	Custom stop request for the given requestld with all properties	Passed
18.3	Get custom stop requests ref. to	CitizenApp has the requestId	./customStops?deviceId={deviceId}	All custom stops for the given deviceld with all properties	Passed

		deviceld			
19	IC_B6	to custom	DriverApp send status as complete	See above with status complete	

Author: Ricarda Rosemann

Status: Complete

Reviewer: Muhammad Zeeshan

**Review Status:** Tested and completed