

Event	Elevator	Event Recv Time	Scheduled Time	Av.?	Rescheduled Time	R. Elevator	Pick Up Time	Arrive Time	Carry Time	Queue Time	Sched Time
(2, 5)	0	17:24:44.593	17:24:44.597	Y	17:24:54.826	1	17:25:00.000	17:25:20.000	00:00:20.000	00:00:15.407	00:00:00.004
(4, 11)	1	17:24:44.598	17:24:44.602	Y	-	-	17:25:19.920	17:26:31.239	00:01:11.319	00:00:35.322	00:00:00.004
(22, 3)	2	17:24:44.603	17:24:44.605	Y	-	-	17:25:56.012	17:27:53.473	00:01:57.461	00:01:11.409	00:00:00.002
(12, 11)	3	17:24:45.606	17:24:45.609	Y	-	-	17:25:25.906	17:25:38.961	00:00:13.055	00:00:40.300	00:00:00.003
(13, 6)	3	17:24:45.609	17:25:41.977	N	-	-	17:25:53.000	17:26:24.114	00:00:31.114	00:01:07.391	0
(7, 14)	0	17:24:45.612	17:24:45.615	Y	17:24:54.830	1	17:25:49.050	17:27:00.375	00:01:11.325	00:01:03.438	00:00:00.003
(14, 6)	2	17:24:45.615	17:25:59.024	N	-	-	17:26:50.213	17:27:34.415	00:00:44.202	00:02:04.598	0
(9, 14)	0	17:24:46.620	17:24:47.630	Y	17:24:54.831	1	17:26:15.170	17:27:00.375	00:00:45.205	00:01:28.550	00:00:01.010
(5, 12)	0	17:24:47.628	17:24:47.631	Y	17:24:54.829	1	17:25:20.000	17:26:44.310	00:01:24.310	00:00:32.372	00:00:00.003
(16, 14)	2	17:24:47.631	17:25:59.025	N	-	-	17:26:34.140	17:27:34.415	00:01:00.275	00:01:46.509	0
(13, 6)	2	17:24:48.635	17:25:59.025	N	-	-	17:27:03.275	17:27:34.000	00:00:30.725	00:02:14.640	0
(16, 13)	2	17:24:48.641	17:25:59.025	N	-	-	17:26:34.140	17:27:03.275	00:00:29.135	00:01:45.499	0
(1, 15)	3	17:24:48.646	17:26:27.128	N	-	-	17:26:47.180	17:27:39.388	00:00:52.208	00:01:58.534	0
(17, 16)	2	17:24:48.650	17:25:59.025	N	-	-	17:26:21.087	17:26:34.140	00:00:13.053	00:01:32.437	0
(4, 8)	0	17:24:49.662	17:24:49.665	Y	17:24:54.827	1	17:25:19.920	17:26:02.111	00:00:42.191	00:00:30.258	00:00:00.003

Analysis Results		
All events - time elapsed (nanos)	183,812,170,600.00	The time that the console printed in Scheduler for the time elapsed after all 15 events were handled.
Per event - time elapsed (nanos)	12,254,144,706.67	The amount of time elapsed per event in the scheduler.
Per event - time elapsed (millis)	12254.14471	The amount of time elapsed per event in the scheduler.
Carry time - average (hh:mm:ss)	00:00:48.372	The average amount of time that a passenger stayed in the elevator. Makes sense.
Queue time - average (hh:mm:ss)	00:01:15.111	The average amount of time between an event being received, and the elevator arriving at the pick-up floor of that event. Number valid for this case.
Scheduling time - average (hh:mm:ss)	00:00:00.069	We only consider the times where an elevator was available when calculating the average scheduling time. Amount of time the scheduling algorithm takes.

Testing the Results

Here we test the results of the timing analysis.

In particular, in this test we are looking at the carry time between floors 4 to 11 (scheduled to elevator 1).

The carry time was, 1 minute and 11 seconds.

	Time (s)	Stop	Add-on Time (s)
4		Y	8
5	5	Y	8
6	4.14	N	0
7	4.14	Y	8
8	5	Y	8
9	5	Y	8
10	4.14	N	0
11	4.14	Y	0
	31.56		40
	71.56	seconds	

The results of our analysis show that the carry time seen from log file are consistent with the amount of time we expect.

The expected time was very similar to the observed time.

Heading Descriptions (Main Table)	
Event	Event descriptor - where the passenger is, and where the destination is.
Elevator	The elevator the event was ORIGINALLY scheduled to.
Event Recv Time	The time that the event was received in the Scheduler. (hh:mm:ss)
Scheduled Time	The time that the event was ORIGINALLY scheduled at. (hh:mm:ss)
Av.?	Whether there was an elevator available for the event at the time of scheduling or not. (Y/N)
R. Elevator	The elevator the event was rescheduled to, if applicable.
Pick-Up Time	The time that the elevator arrived at the passenger. (hh:mm:ss)
Arrive Time	The time that the elevator arrived at the passenger's destination. (hh:mm:ss)
Carry Time	The amount of time the passenger was in the elevator for. (hh:mm:ss)
Queue Time	The amount of time between the event being received, and the elevator arriving at the passenger floor. (hh:mm:ss)
Sched Time	The amount of time it took to schedule the event (if there was no elevator available, then we ignore it). (hh:mm:ss)