



Confidential

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| <input type="checkbox"/> Requirement (RQ) | <input type="checkbox"/> External Specification (ES) |
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| <input type="checkbox"/> Test Plan (TP) | <input type="checkbox"/> Release Note (RN) |
| <input type="checkbox"/> Bug Report (BR) | <input type="checkbox"/> Training Material (TM) |
| <input checked="" type="checkbox"/> Other <u>Indoor Test Report MESH 9 Hops Linear</u> (OT) | |

Document ID.

OT-2012-11-01401

Subject

Indoor Test Report
of
APM-10xR

Revision History

Rev.	Date	Author	Reason for Changes
1.0	Nov. 14, 2012	Jacky Cheng	• Initial draft
1.1	Nov. 19, 2012	Jacky Cheng	• Fix testing attenuator values
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1.0 Scope

1.1 Introduction

This file describes the test report of IO-Power APM-10xR Access Point indoor MESH straight line(9 hops).

1.2 Date/Time

- Date of test : 2012/11/14
- Operating time : AM 10:00 ~ PM 16:00

1.3 Location

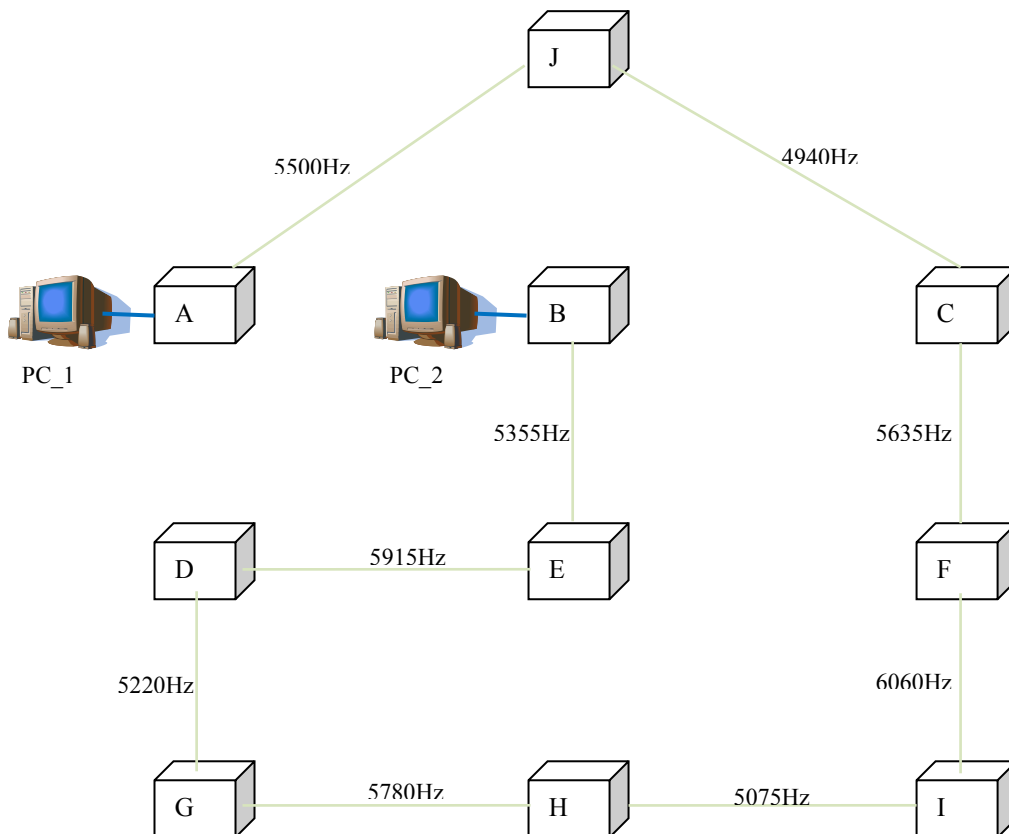
- IO-Power Office

1.4 Equipment

- Wireless device : APM-103R x 10
- Antenna : None, Indoor RF cable and each Antenna port adds 60dB attenuator(30dB x 2 connected)
- Computer : ASUS computer x 2
- Software : Windows XP SP3 、IxChariot 5.40
- APM-103R Firmware Version : 2.04

1.5 Topology

- AP-A ~ AP-J, MESH version, PC_1 to PC_2 @ 9 Hops





2.0 Environment

In the last page, each AP is connected to another by 2 units of RF cable(2x2 MIMO), and add 60dB attenuator(30dB x 2), AP is set HT40 mode.

A is MG(MESH Gateway), and other are MAP(MESH Access Point) ◦

Test 2 PCs by IxChariot, operating TCP throughput by 100pairs High Performance Script.

3.0 Test Results

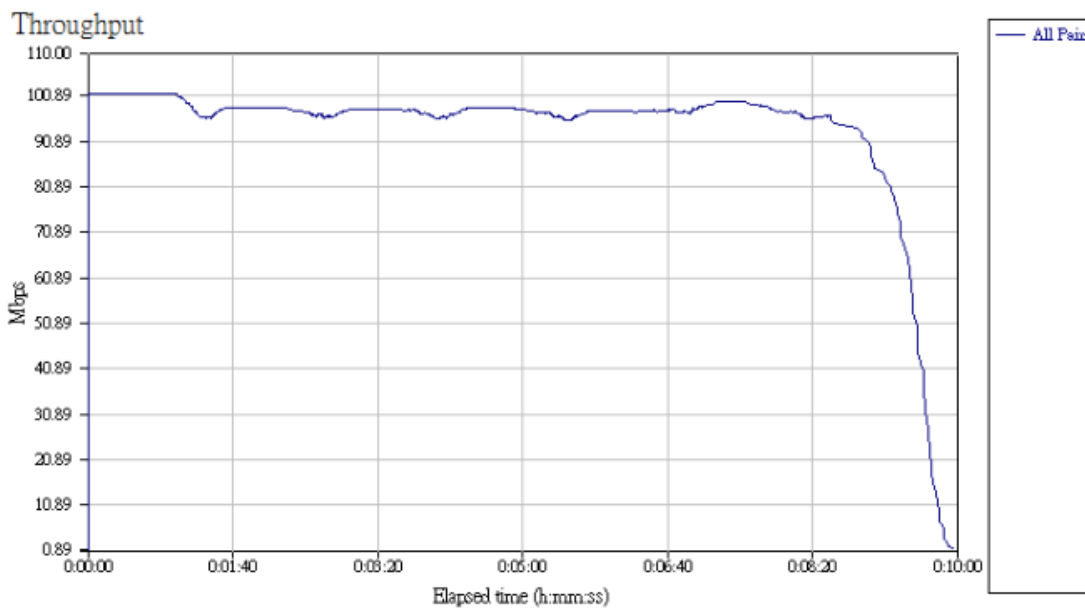
100Tx from PC_1 to PC_2	Total Throughput(Mbps)	Response Time	Transaction Rate
	93.145	81.737	1.224
100Rx from PC_1 to PC_2	Total Throughput(Mbps)	Response Time	Transaction Rate
	129.889	58.878	1.710
50T50R from PC_1 to PC_2	Total Throughput(Mbps)	Response Time	Transaction Rate
	121.895	77.749	1.603

3.1 Test1-100 pairs from PC_1 to PC_2

Report	Total Throughput(Mbps)	Response Time	Transaction Rate
	93.145	81.737	1.224

Throughput

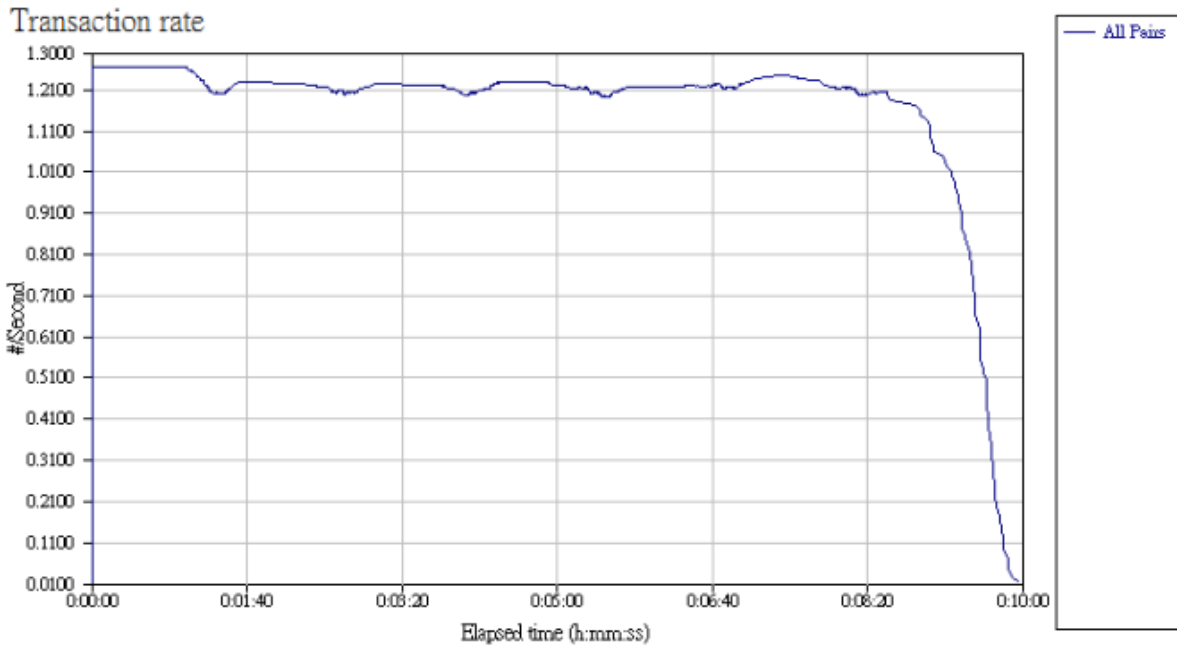
Pair 100	0.999	0.887	1.106	0
Totals:	93.145	0.797	1.356	





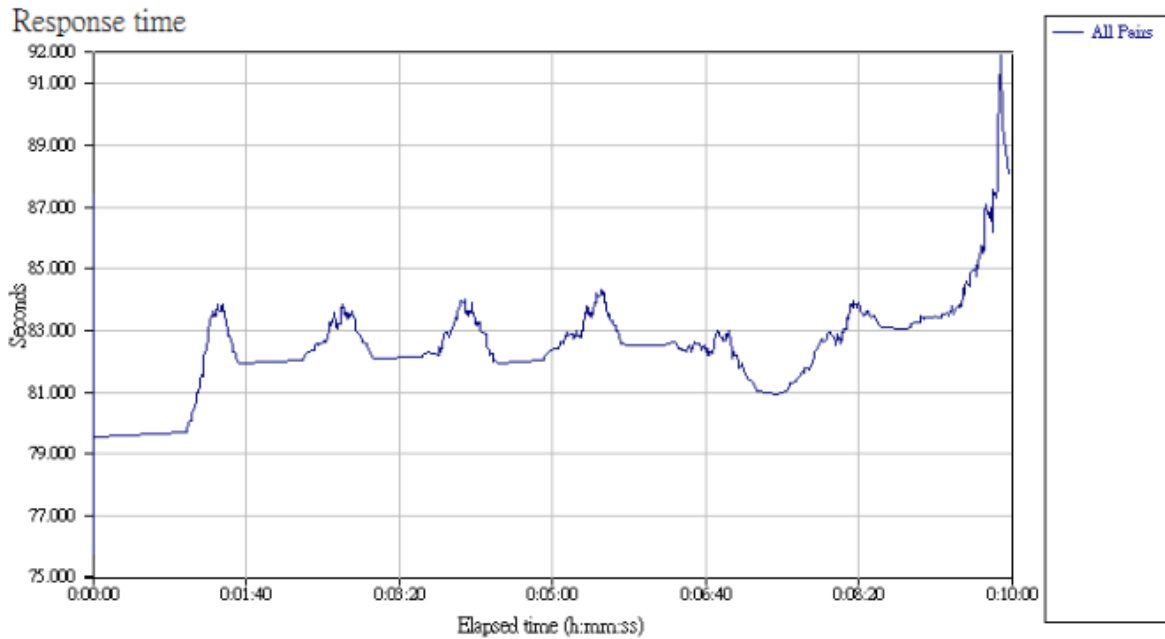
Transaction Rate

Pair 100	0.012	0.011	0.014
Totals:	1.224	0.010	0.017



Response Time

Pair 100	80.070	72.356	90.174
Totals:	81.737	59.006	100.414



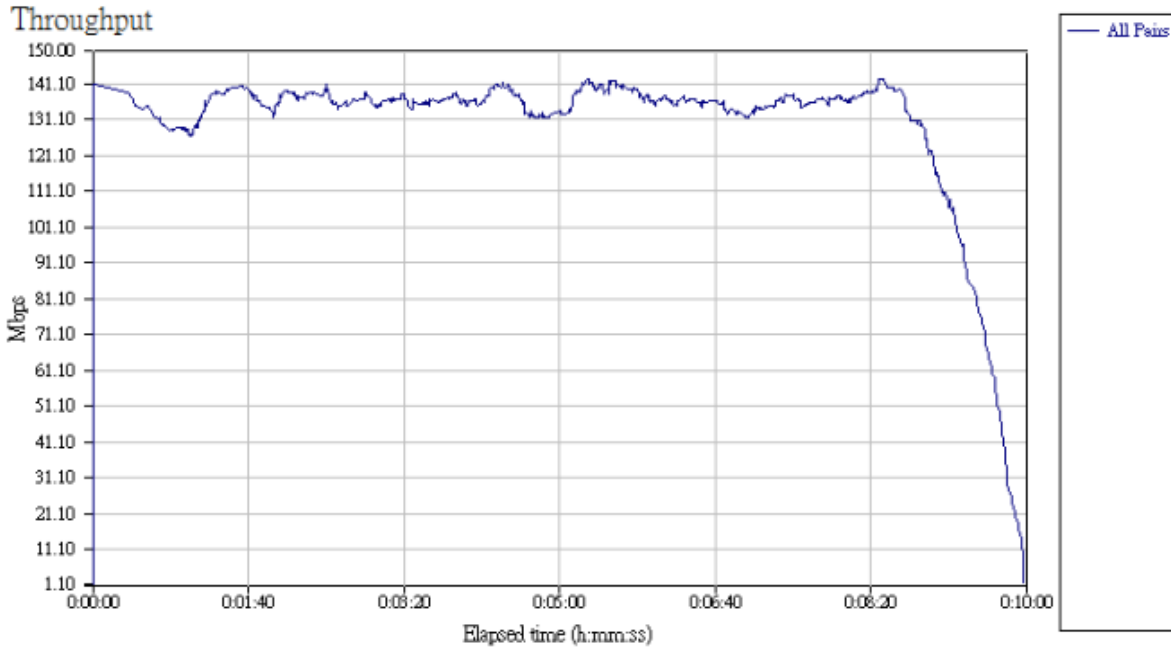


3.2 Test2-100 pairs from PC_2 to PC_1

Report	Total Throughput(Mbps)	Response Time	Transaction Rate
	129.889	58.878	1.710

Throughput

Pair 100	1.537	1.268	1.809	0
Totals:	129.889	0.759	4.531	

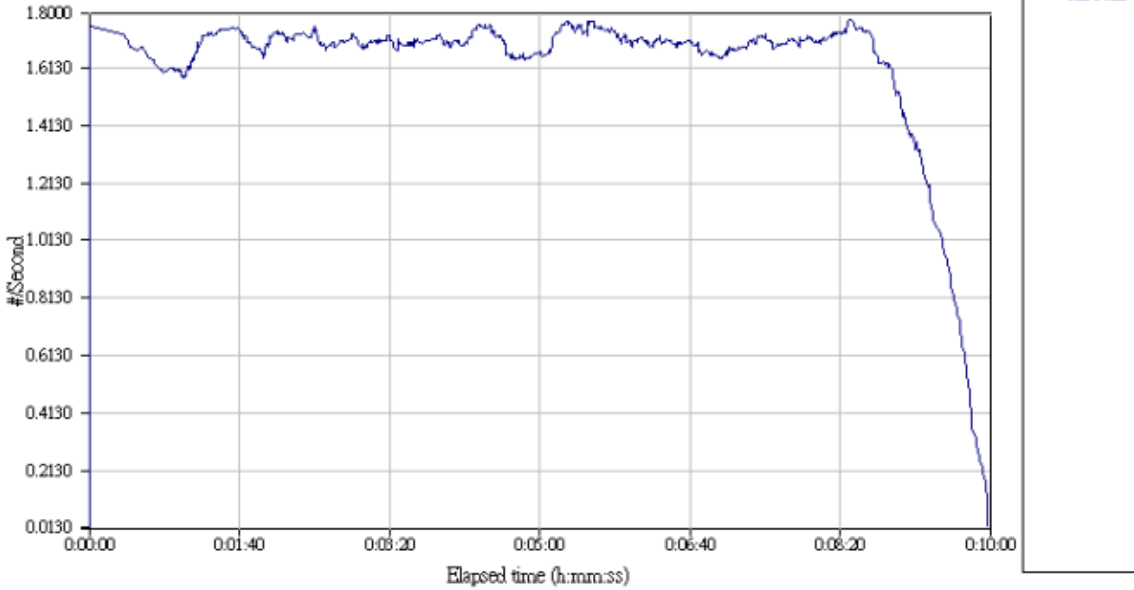




Transaction Rate

Pair 100	0.019	0.016	0.023
Totals:	1.710	0.009	0.057

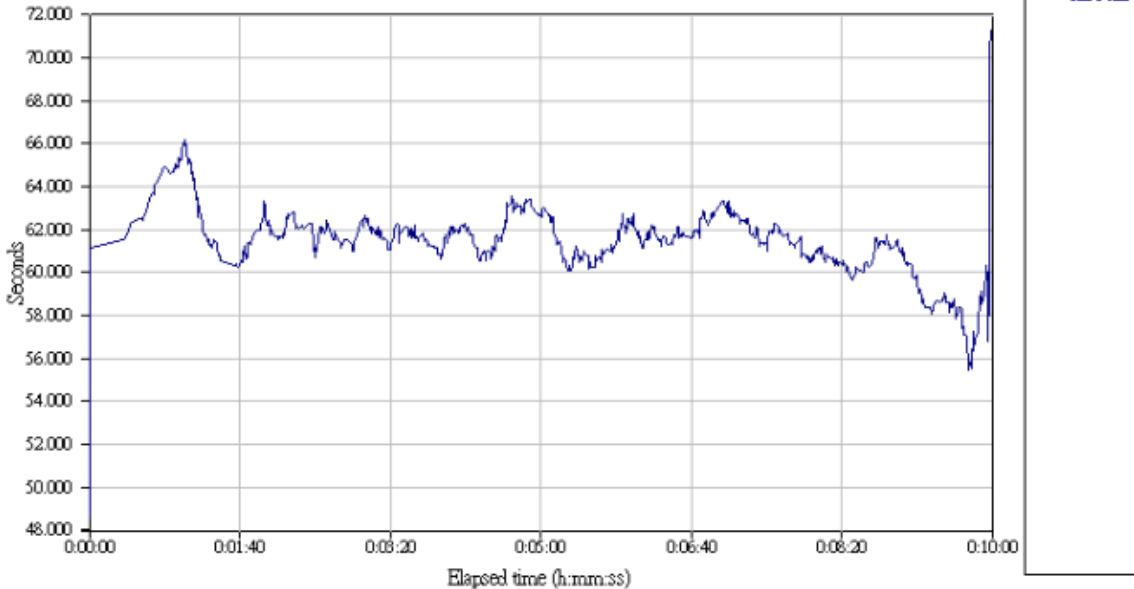
Transaction rate



Response Time

Pair 100	52.047	44.212	63.083
Totals:	58.878	17.655	105.448

Response time



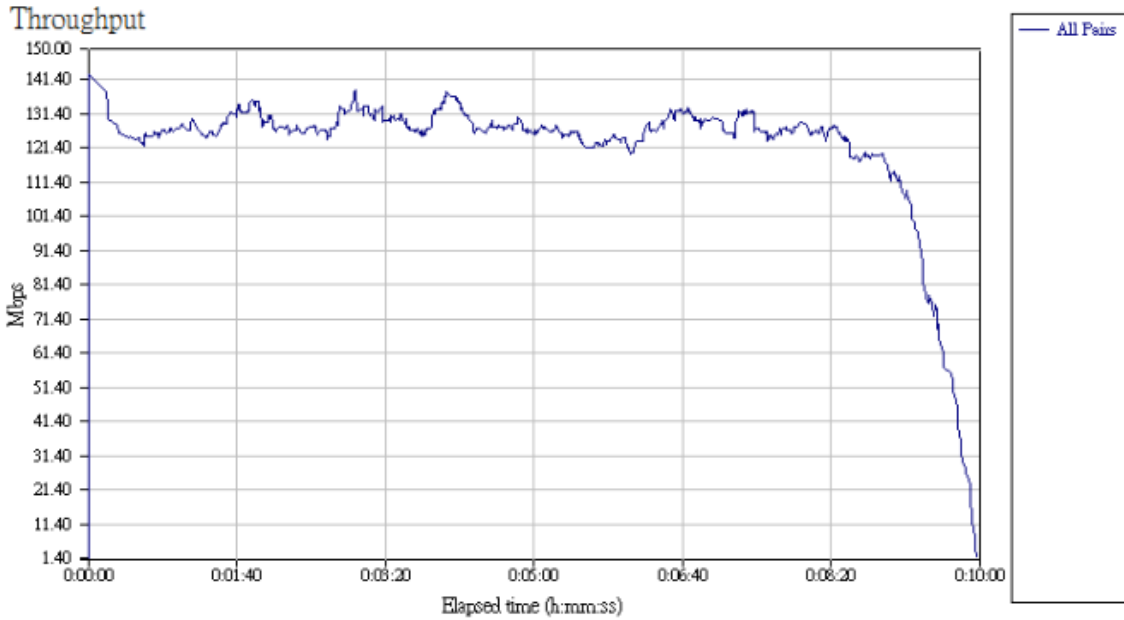


3.3 Test2-100 pairs(50T50R) between PC_1 and PC_1

Report	Total Throughput(Mbps)	Response Time	Transaction Rate
	121.895	77.749	1.603

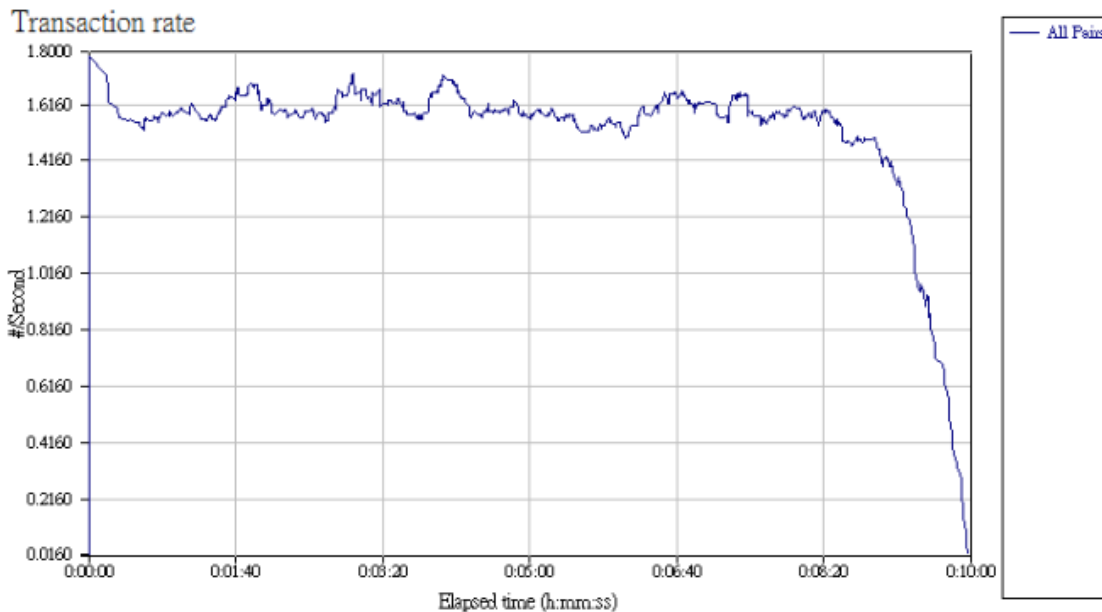
Throughput

Pair 100	1.634	1.015	6.112	0.076
Totals:	121.895	0.574	6.773	



Transaction Rate

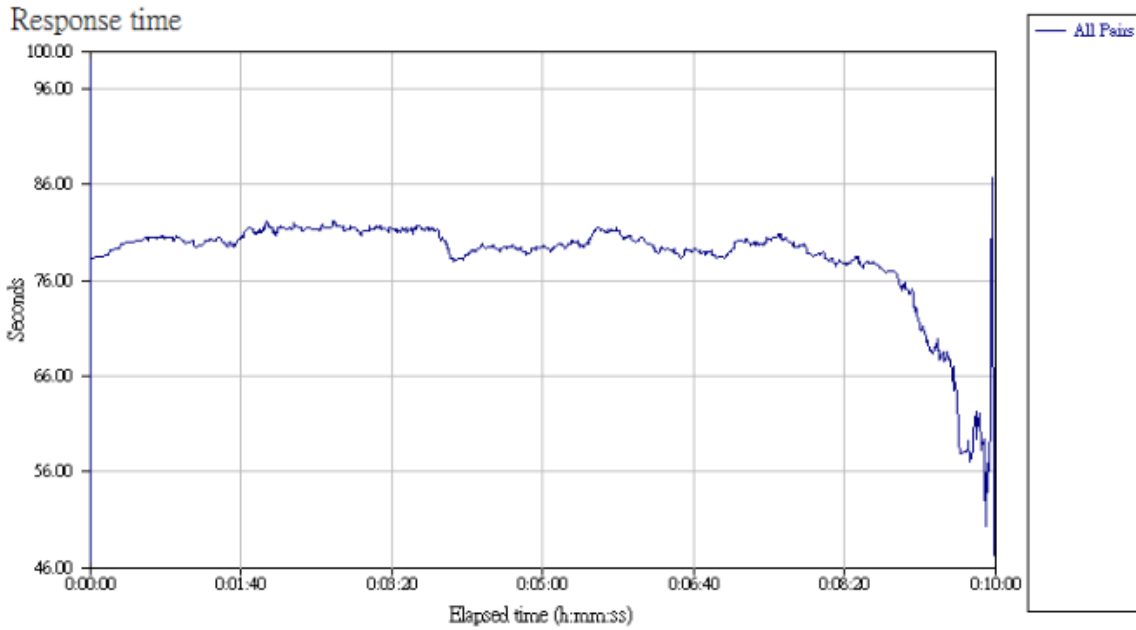
Pair 100	0.020	0.013	0.076
Totals:	1.603	0.007	0.085





Response Time

Pair 100	48.955	13.090	78.813
Totals:	77.749	11.811	139.461



Appendix I

None.