Report

All readings are taken 3 times to be more accurate.

Stats for Non-persistent http connection

	Time(sec)	Time(sec)	Time(sec)	Average (sec)
a.jpg	0.6572	1.0691	0.7362	0.8208
b.mp3	1.2873	1.6966	1.4456	1.4765
c.txt	0.0600	0.0493	0.0288	0.0460
Total	2.0054	2.8158	2.2108	2.3440

Total time is taken from program execution. It is not sum of all files time as given in table. Each file time includes the connection creation time in it.

Stats for Persistent http connection

	Time(sec)	Time(sec)	Time(sec)	Average(sec)
a.jpg	0.5438	0.5169	0.6026	0.5544
b.mp3	1.2627	0.9326	0.9166	1.0373
c.txt	0.0552	0.0350	0.0148	0.0350
Connection creation	0.0309	0.0242	0.0269	0.0273
Total	1.8942	1.5123	1.5657	1.6574

Total time is taken from program execution. It is not sum of all files time as given in table.

Since there is only one connection made for persistent files transfers. We will add average of connection creation time to all files time.

So we will add (connection creation time)/(number of files) to all files time. i.e 0.0273/3=0.009

	Average(sec)
a.jpg	0.5544+0.009=0.5634
b.mp3	1.0373+0.009=1.0463
c.txt	0.0350+0.009=0.044
Total	1.6574

Summary:

Non-Persistent	
	Average (sec)
a.jpg	0.8208
b.mp3	1.4765
c.txt	0.0460
Total	2.3440

Persistent	
	Average(sec)
a.jpg	0.5634
b.mp3	1.0463
c.txt	0.044
Total	1.6574

Conclusion:

Thus from summary data we can easily observe that in non-persistent http connection, the average time taken by each file or the average total time, are greater than the times in persistent http connection. The reason is in non-persistent http connection for each file new connection has to be made while in persistent http connection only one connection has to be made for all files.

In each connection creation, TCP has to perform 3-way handshake. So in non-persistent there is 3 times 3-way handshake while in persistent there is only one 3-way handshake.

So the time is less in persistent http connection.