**Memory usage:**

From the output\_memory.txt, the total Allocs range from 27-101696, large number of them are ranged in [29-64], [5918-5986], [39463-39515], [47513-52021], [69343-69457], [81060-81127], [101308-101696]. If only consider client side memory usage, there are exactly 6 ranges (the first 6). The total bytes and peak bytes also have 6 relative ranges.

**Representative schemes for :**

[29-64]: TLS-PSK-AES128-GCM-SHA256 No Session Resumption –s

TLS-DHE-PSK-CHACHA20-POLY1305 Session Resumption –s

DTLS-PSK-CHACHA20-POLY1305 No Session Resumption –s

TLS-PSK-AES128-CBC-SHA256 Session Resumption –s

TLS-PSK-AES128-CBC-SHA No Session Resumption –s

TLS-PSK-CHACHA20-POLY1305 Session Resumption -s

[5918-5986]:

TLS-DHE-PSK-AES128-CBC-SHA256 No Session Resumption –s

TLS-DHE-PSK-CHACHA20-POLY1305 No Session Resumption –s

TLS-DHE-PSK-AES128-CBC-SHA256 No Session Resumption –s

TLS-ECDHE-PSK-AES256-GCM-SHA384 Session Resumption –s

DTLS-ECDHE-PSK-AES128-GCM-SHA256 Session Resumption –s

TLS-DHE-PSK-AES128-CBC-SHA256 Session Resumption –s

TLS-DHE-PSK-CHACHA20-POLY1305 No Session Resumption -s

[39463-39515]:

TLS-DHE-RSA-AES128-CBC-SHA256 Session Resumption

DTLS-DHE-RSA-CHACHA20-POLY1305 Session Resumption

TLS-ECDHE-PSK-AES128-CBC-SHA256 No Session Resumption –s

TLS-ECDHE-PSK-CHACHA20-POLY1305 No Session Resumption -s

[47513-52021]:

TLS-ECDHE-ECDSA-CHACHA20-POLY1305 Session Resumption

TLS-DHE-RSA-AES128-SHA No Session Resumption

TLS-DHE-RSA-AES256-SHA No Session Resumption

TLS-ECDHE-ECDSA-AES128-SHA256 Session Resumption

TLS-DHE-RSA-CHACHA20-POLY1305 No Session Resumption

DTLS-ECDHE-ECDSA-AES128-SHA Session Resumption

TLS-DHE-RSA-AES256-SHA No Session Resumption

TLS-DHE-RSA-AES128-GCM-SHA256 No Session Resumption

DTLS-ECDHE-ECDSA-AES256-SHA Session Resumption

[69343-69457]:

TLS-ECDHE-RSA-AES128-GCM-SHA256 Session Resumption

TLS-ECDHE-RSA-AES256-SHA Session Resumption

TLS-ECDHE-RSA-CHACHA20-POLY1305 Session Resumption

TLS-ECDHE-ECDSA-AES128-GCM-SHA256 No Session Resumption

TLS-ECDHE-ECDSA-CHACHA20-POLY1305 No Session Resumption

TLS-ECDHE-ECDSA-AES256-GCM-SHA384 No Session Resumption

[81060-81127]:

DTLS-PSK-AES128-SHA Session Resumption –s

TLS-ECDHE-RSA-AES256-GCM-SHA384 No Session Resumption

TLS-ECDHE-RSA-AES128-GCM-SHA256 No Session Resumption

TLS-ECDHE-RSA-AES256-SHA384 No Session Resumption

TLS-PSK-CHACHA20-SHA384 Session Resumption –s

DTLS-PSK-AES128-SHA Session Resumption -s

TLS-ECDHE-RSA-AES128-SHA256 No Session Resumption

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Client side** | | | | **Server side** | | | |
|  | Total allocs | Total byes | Peak bytes | Current bytes | Total allocs | Total byes | Peak bytes | Current bytes |
| Level 1 | 29-64 | 9703-  17912 | 8383-  9017 | 0 | 29-54 | 8178-  14191 | 7116-  10620 | 0 |
| Level 2 | 5937-  5986 | 7183309-  7289754 | 27480-  27608 | 0 | 5918-  5957 | 7155657-  7327679 | 28631  -29601 | 0 |
| Level 3 | 39483-  39527 | 177633873-  177642869 | 17772-  17772 | 0 | 39463- | 177631832-177638813 | 18028-  18028 | 0 |
| Level 4 | 47513-  47568 | 38672867-  38853956 | 36098-  35970 | 0 | 51989-  52009 | 39175210-  39133263 | 36960-  36960 | 0 |
| Level 5 | 69343-  69457 | 267190868 | 27446 | 0 | 101359- 101696 | 309438808-311214392 | 34653- 32463 | 0 |
| Level 6 | 81060-  81127 | 209225225-  209230008 | 35619-  31416 | 0 | 85562-  85540 | 209582182-209584016 | 35726-  35167 | 0 |

**Connection speed and transfer speed**

From the output\_benchmark.txt, the connection speed ranges from 0.298 - 122.981, large number of them are ranged in [0.298-0.360], [1.715-3.884], [5.038-9.618], [12.897-22.930], [30.206-38.265], [41.104-122.981].