

RTT = Round Trip Time

T(RTT) = Total Round Trip Time

OTT = Object Transfer Time

FTT = File Transfer Time

Object = Number of Object(s)

$RTT = ( \text{Send} + \text{Receive} ) \text{ or } ( x + y )$

**Persistent HTTP:**

$T(RTT) = (\text{Object} \times RTT) + RTT \text{ or } (\text{Object} + 1) \times RTT$

$OTT = \text{Object} \times \text{Object Time}$

$FTT = T(RTT) + OTT$

**or**

$FTT = [ (RTT + \text{Object Time}) \times \text{Object} ] + RTT$

**Non-persistent HTTP:**

$T(RTT) = \text{Object} \times (2 \times RTT)$

$OTT = \text{Object} \times \text{Object Time}$

$FTT = T(RTT) + OTT$

**or**

$FTT = [ (2 \times RTT + \text{Object Time}) \times \text{Object} ]$

**Pipelining HTTP:**

Effective Object = (Object/Pipeline Size)

$T(RTT) = (\text{Effective Object} \times RTT) + RTT \text{ or } (\text{Effective Object} + 1) \times RTT$

$OTT = \text{Effective Object} \times \text{Object Time}$

$FTT = T(RTT) + OTT$

**or**

$FTT = [ (RTT + \text{Object Time}) \times \text{Effective Object} ] + RTT$