

**Client**

Public key:  $K_S^+$

Private key:  $K_S^-$

signed certificate (contains  $K_S^+$ )

**Server**

Public key:  $K_S^+$

Private key:  $K_S^-$

signed certificate (contains  $K_S^+$ )

Record start time

Read the file;  
Divide file into packets  $P$   
with a size of 117 bytes;  
For each packet,  
encrypt it using public key  
and send it

Loop to send data  
packet by packet

