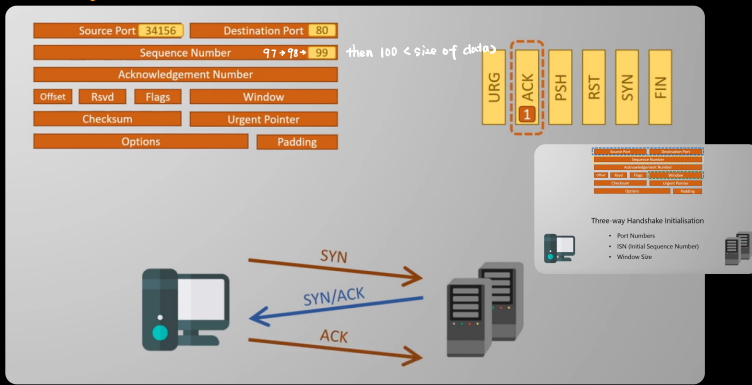


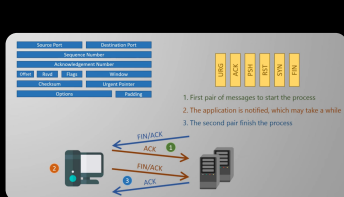
3 way handshake \rightarrow build connection



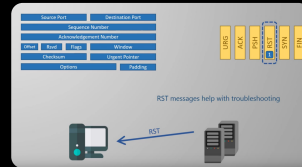
windowing < TCP window size >

Seq x \longrightarrow window y
Seq x $\quad \quad \quad -x$
 \vdots $\quad \quad \quad -x$
Seq x $\quad \quad \quad \vdots$
 $\quad \quad \quad -x$

When window size reduces
to zero, resend Ack $y+k$
to reset window size



error \rightarrow drop connection



error recovery

- ① record the missing data packet's Ack number x
- ② send Ack(x) back to sender
- ③ sender resend from Byte x

Selective Acknowledgement (SACK)

receiver inform the sender about the successfully delivered packets
the sender thus only need to resend actually lost packets

Dynamic Windowing

change window size to accommodate network condition