

ENSC-351

# XMODEM Protocol Background

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# From noisy telephone lines to CISCO switches

- The XMODEM file transfer protocol was devised many years ago to be able to reliably transfer files between computers, possibly over noisy telephone lines where some bits being transmitted might get corrupted.
- The protocol has still been used in recent years, for example to copy firmware to a CISCO C3750 switch. Product in photo is \$ 700 USD:  
<https://www.youtube.com/watch?v=Sl98ySW6JWQ&t=4m9s>



# Old 300 bps Modem from back in the day

- The protocol was originally used with modems running no faster than 300bps (bits per second). That's REALLY slow by today's standards.
- Here's a demo of a modem from that time in the computer age:  
<https://www.youtube.com/watch?v=X9dpXHnJXaE&t=2m49s>



- Of course, the typical phone didn't have buttons back on those days:  
<https://www.youtube.com/watch?v=u52UUO6vN-E&t=1m7s>

Typical phone  
back in the day

- But we digress...

