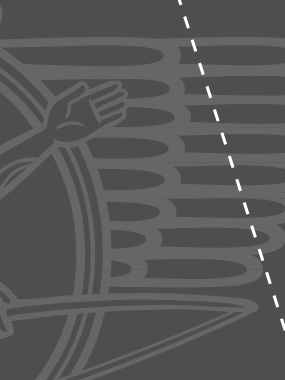


The History of Data Exchange

Whether it's complaining about the quality of copper (the subject of the first letter ever discovered), or transmitting secure transaction data via the cloud, humans have always needed to **exchange information**. For just about as long, other humans have tried to intercept this data for their own purposes. Here are some of the **many ways that people have communicated** with each other over the years—while at the same time trying to protect themselves from snoopers.



3200 BCE

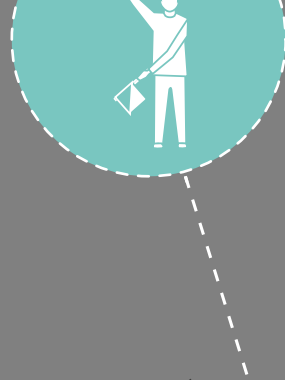
Letters

Humankind's **Age of Literacy** dawned more than five thousand years ago, with the invention of writing in ancient Mesopotamia.

Around 700 BCE

Messenger Pigeons

Homing pigeons have been utilized for carrying messages since as early as the first Persian Empire. They were likely used during Julius Caesar's conquest of Gaul—and **250,000 pigeons** were kept in service by the United Kingdom during World War II.



1792

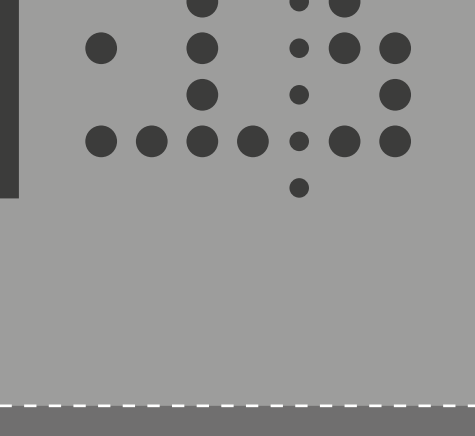
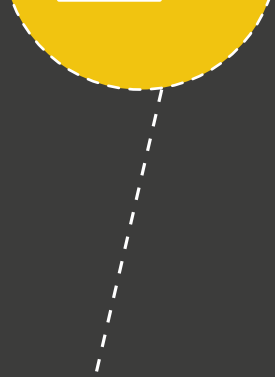
Semaphore Line

Picture a chain of **windmills** passing information across 18th-century France with an alphabet made from wooden paddles. This primitive optical telegraph system once covered a total distance of **3,000 miles**.

1844 AD

Telegraph

The electric telegraph gained popularity due to the efficiency of Morse code. Modern researchers estimate that even with the aid of computers, the efficiency of Morse code could have only been **improved by a further 15%**.



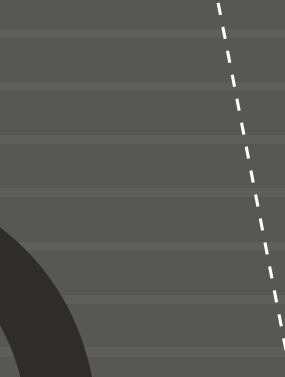
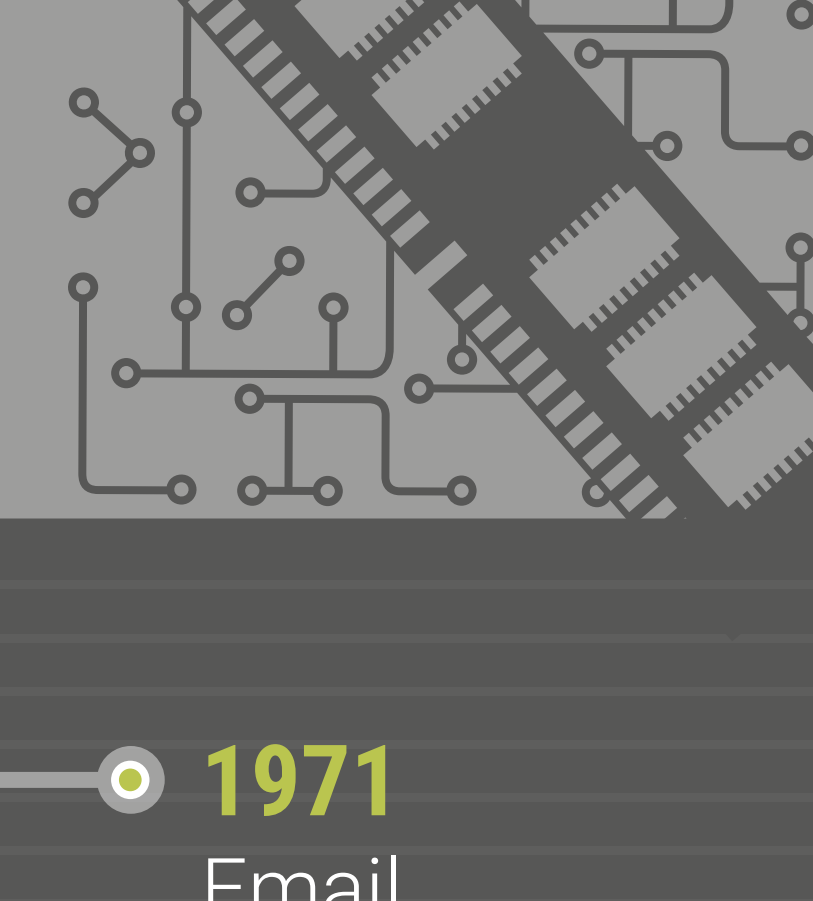
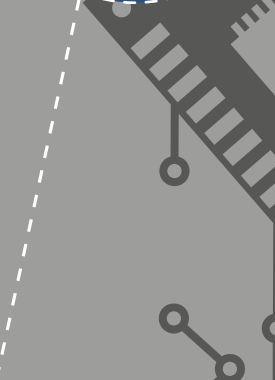
From Fish to Fiber-Optics

"Net-works" referred to the netting one would use to catch fish. When observers in the 19th century began to see a sprawling mesh of telegraph cables above their heads, they thought of an iron network, ensnaring the entire world.

1951

Magnetic Data Tape Storage

The first tape drive - **UNISERVO** - was used with the first computer - UNIVAC. The tape was half an inch wide, 1200 feet long, and could store a whopping **224 kB**.



1971

Email

- The first program to use a network to send email across the Arpanet was a program called **SNDMSG**, created by Ray Tomlinson.

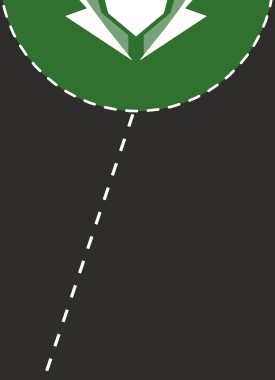
- This program introduced the convention of using a **"@"** sign to denote a hostname.

In 1971, Arpanet had 23 hosts, resulting in a few dozen email users. As of 2015, **2.6 billion people** use email.

1971

Creeper

The internet introduced its first virus, a program that **spread across Arpanet terminals** printing the message:



1983

Cloud Storage

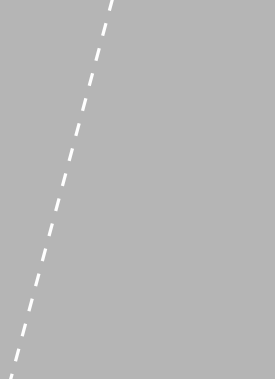
- CompuServe was effectively the first cloud storage provider, offering its users a whopping **128K** of network storage.

- Cisco predicts that by 2019, **86%** of computing tasks will be completed in cloud data centers.

1991

Pretty Good Privacy (PGP)

The first widely-used **email encryption** standard was created as a way for anti-nuclear activist Phil Zimmerman to communicate without being spied on by the government.

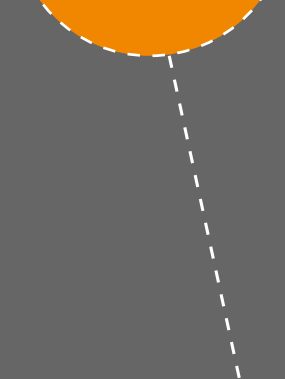


128 bits:

The minimum size of a PGP encryption key.

40 bits:

As of 1993, any cryptographic system with a key size larger than 40 bits was considered a military weapon, and forbidden from export.



1995

Secure Network Programming

- In 1993, researchers from **Netscape** began to develop a security protocol which would prevent hackers from snooping on data while it was being transmitted.

- SSL Version 2.0 was the first version of this protocol.

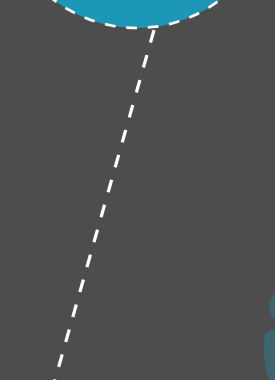
- SSL 3.0 was declared obsolete in 2014, after the POODLE bug revealed an exploit where just **256** SSL requests would begin to reveal encrypted data.

1996

Hotmail

- One of the first free services that allowed users to create their own email addresses and send messages via a browser-based client. In its first year of operation, it attracted **8.5 million users**.

- Users were each given **2 megabytes** of free online storage.



NOW

- People can put **whatever they want** into the cloud, and send whatever they want over email.

- Digital services are on the rise.
- S/FTP is still commonly used.

- Employees need to collaborate with colleagues and to access multiple cloud storages.

- By **2020**, **95%** cloud breaches will be due to human error.

- The average cost of a data breach is **\$3.5 million**.

Safe-T Box offers multiple innovative secure data exchange and secure data transfer solutions.

Try Safe-T Box for Free, Now!



Our secure data exchange broker technology ensures all data transmissions into and out of the organization is secured, governed and audited, preventing employees from exchanging or uploading documents of a sensitive nature, ensuring data entering the organization via digital channels is inspected, while still allowing the entire organization to use the tools that allow their productivity to soar.

Download **Safe-T Box** White Paper Now!

