



ITALIAN INTERNET DAY

FESTEGGIAMO I TRENT'ANNI DI INTERNET IN ITALIA

L'evoluzione della Rete

Giuseppe Augiero

29 aprile 2016 - Italian Internet Day - Area della Ricerca del CNR di Pisa - Giuseppe Augiero



Le applicazioni

WEB 2.0 Landscape

Widget/
component



WEB APPLICATION



Aggregation/
recombination

CONTENT
SHARING



RECOMMENDATIONS/
FILTERING



Collaborative
filtering

SOCIAL NETWORK

Note: Each of these Web 2.0 applications has multiple functionality – for each service the primary positioning has been used

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Hashtag

#ItalianInternetDay

30 anni

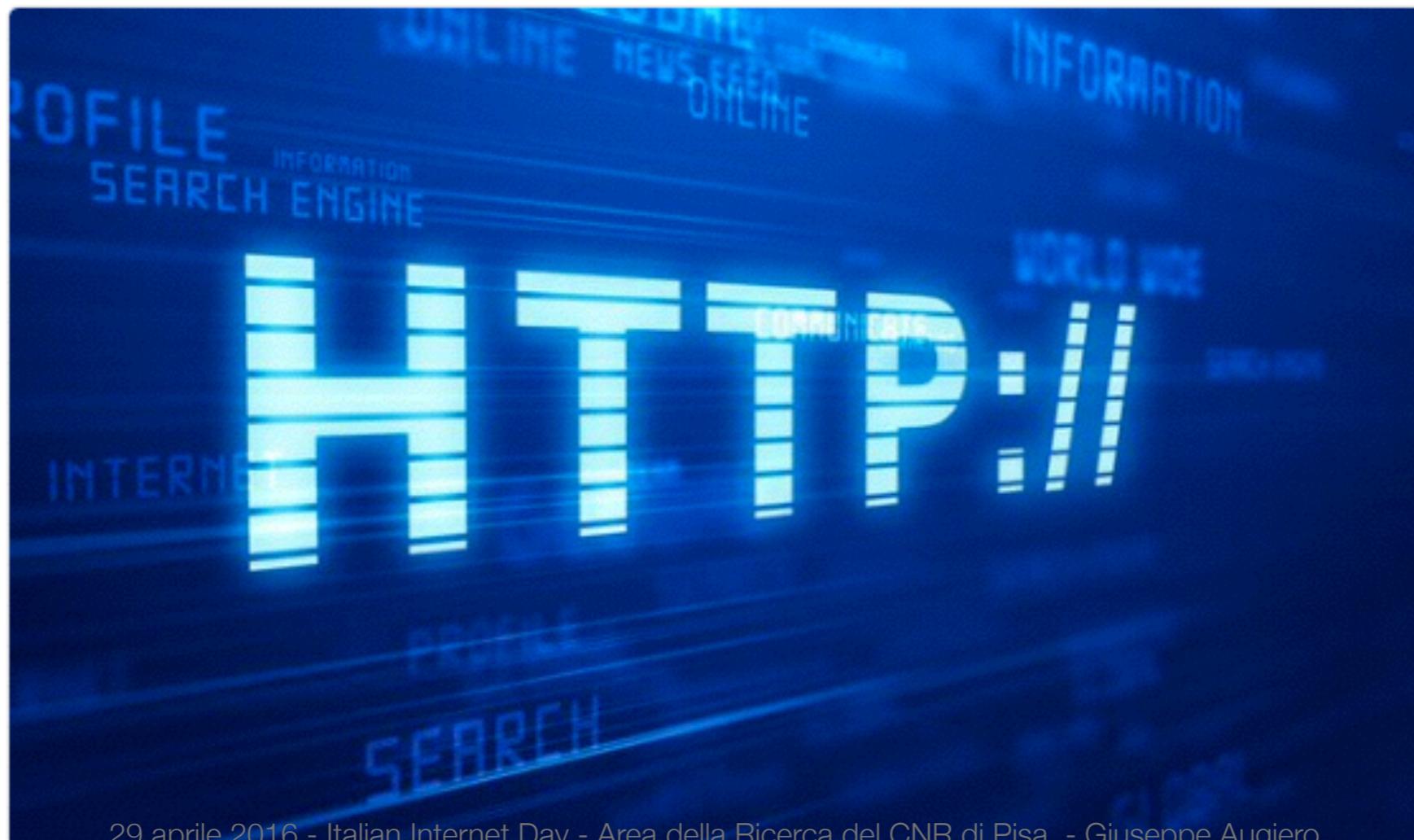


Barbara Vellucci
@barbaravellucci



Segui

#italianinternetday: 30 anni fa scoprivamo il web
fashiontimes.it/2016/04/italia ... via
[@FashionTimesMag](https://twitter.com/FashionTimesMag)



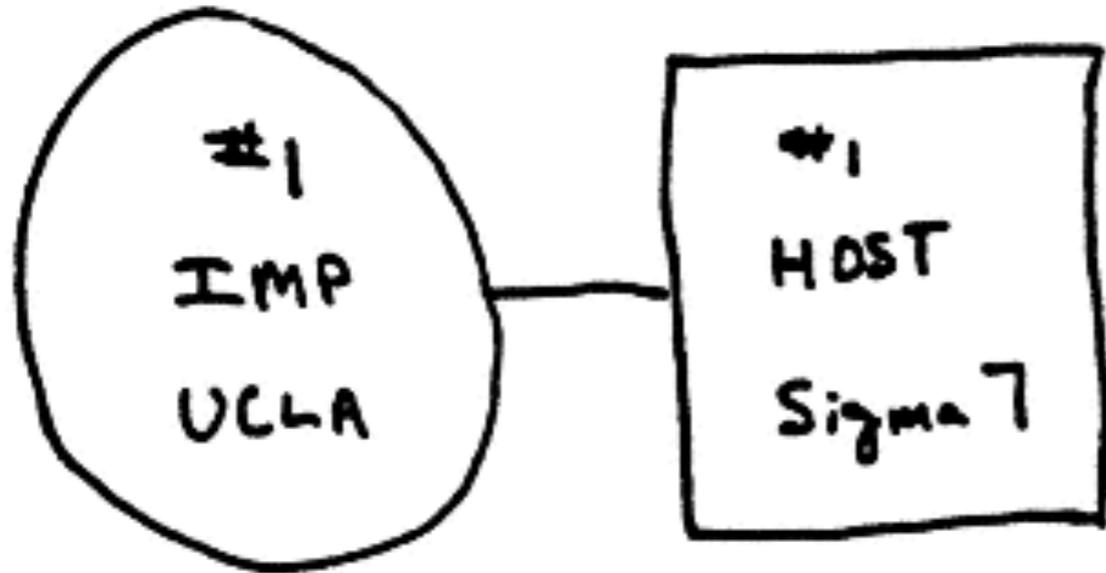
Internet e il Web sono la stessa cosa?



Internet



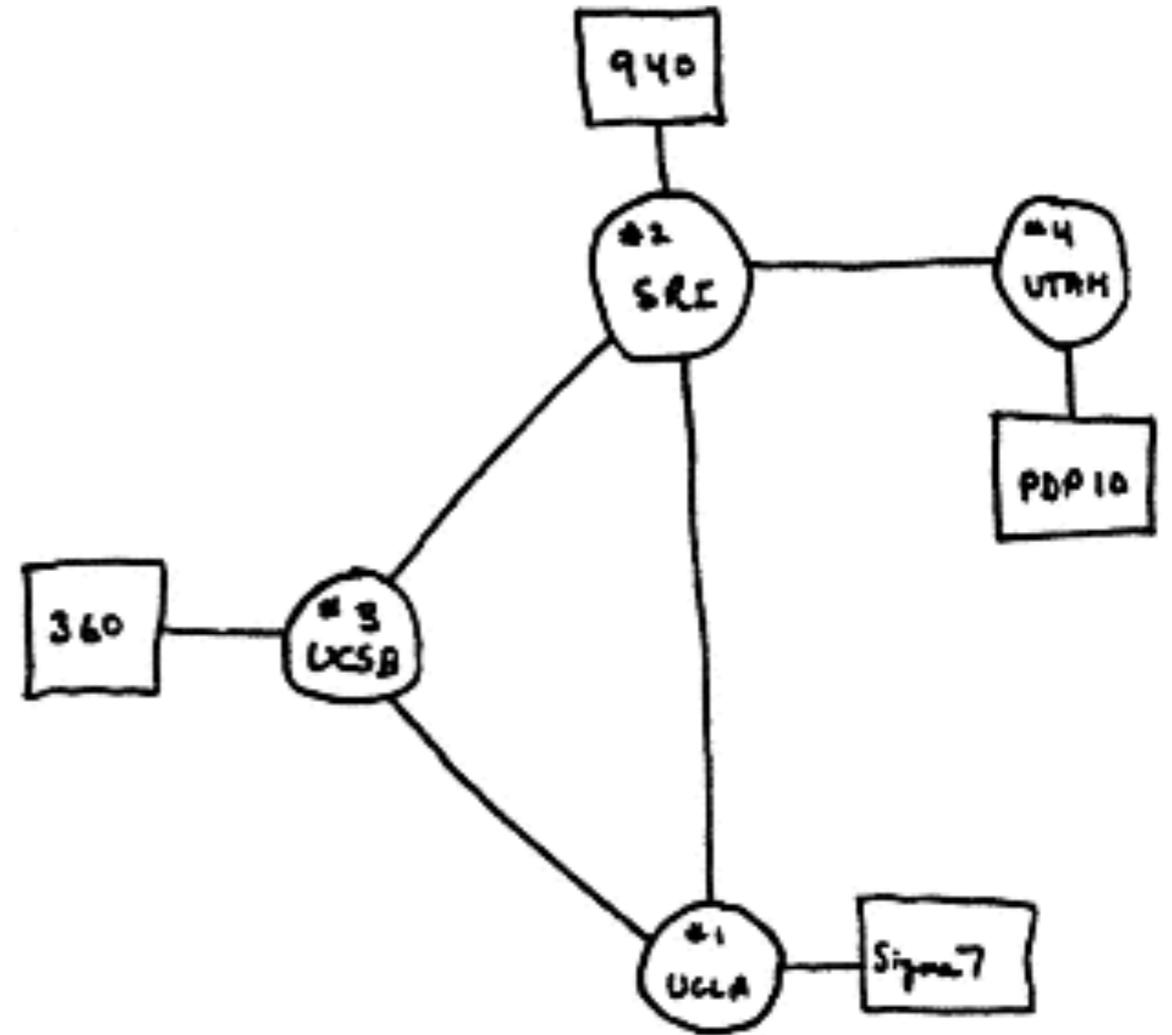
Arpanet



THE ARPA NETWORK

SEPT 1969

1 NODE

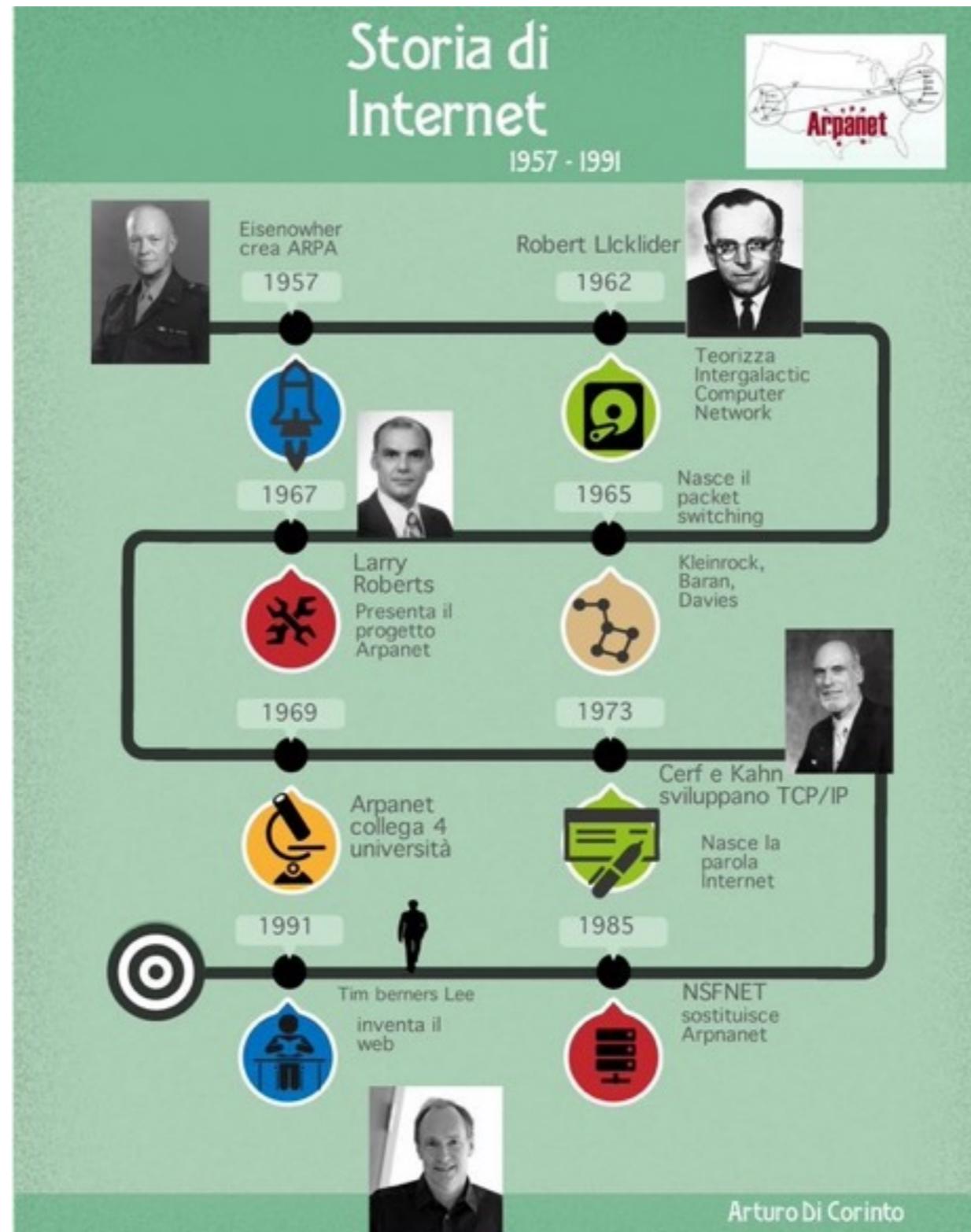


THE ARPA NETWORK

DEC 1969

4 NODES

L'evoluzione



Web

https://www



Protocollo



Tcp/Ip

7 APPLICATION LAYER

- Provides interface to end-user processes
- Provides standardized services to applications

6 PRESENTATION LAYER

- Specifies architecture-independent data transfer format
- Encodes and decodes data; encrypts and decrypts data; compresses data

5 SESSION LAYER

- Establishes, manages, and terminates the sessions between network applications

4 TRANSPORT LAYER

- Manages network layer connections
- Provides reliable packet delivery mechanism

3 NETWORK LAYER

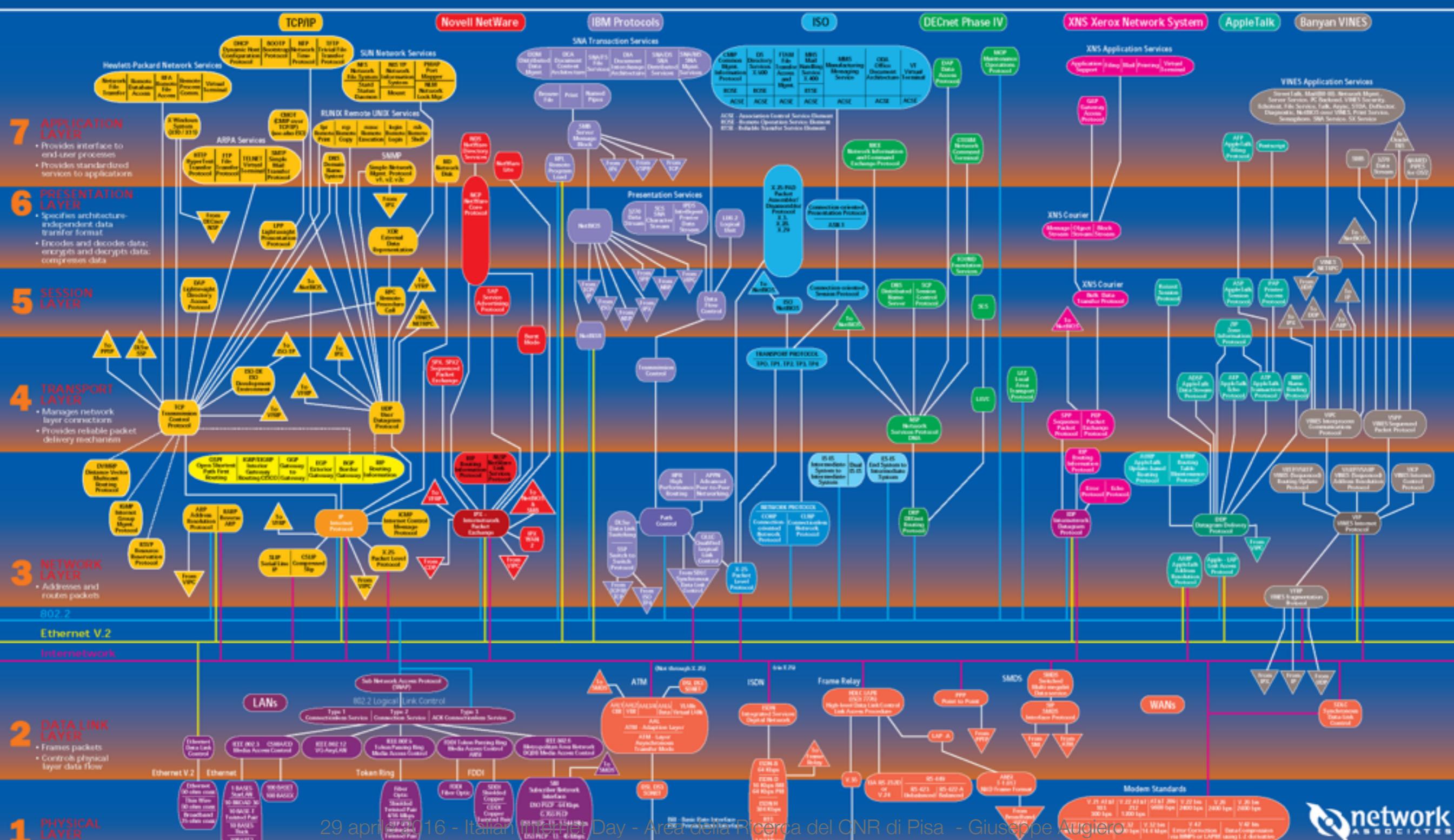
- Addresses and routes packets

2 DATA LINK LAYER

- Frames packets
- Controls physical layer data flow

1 PHYSICAL LAYER

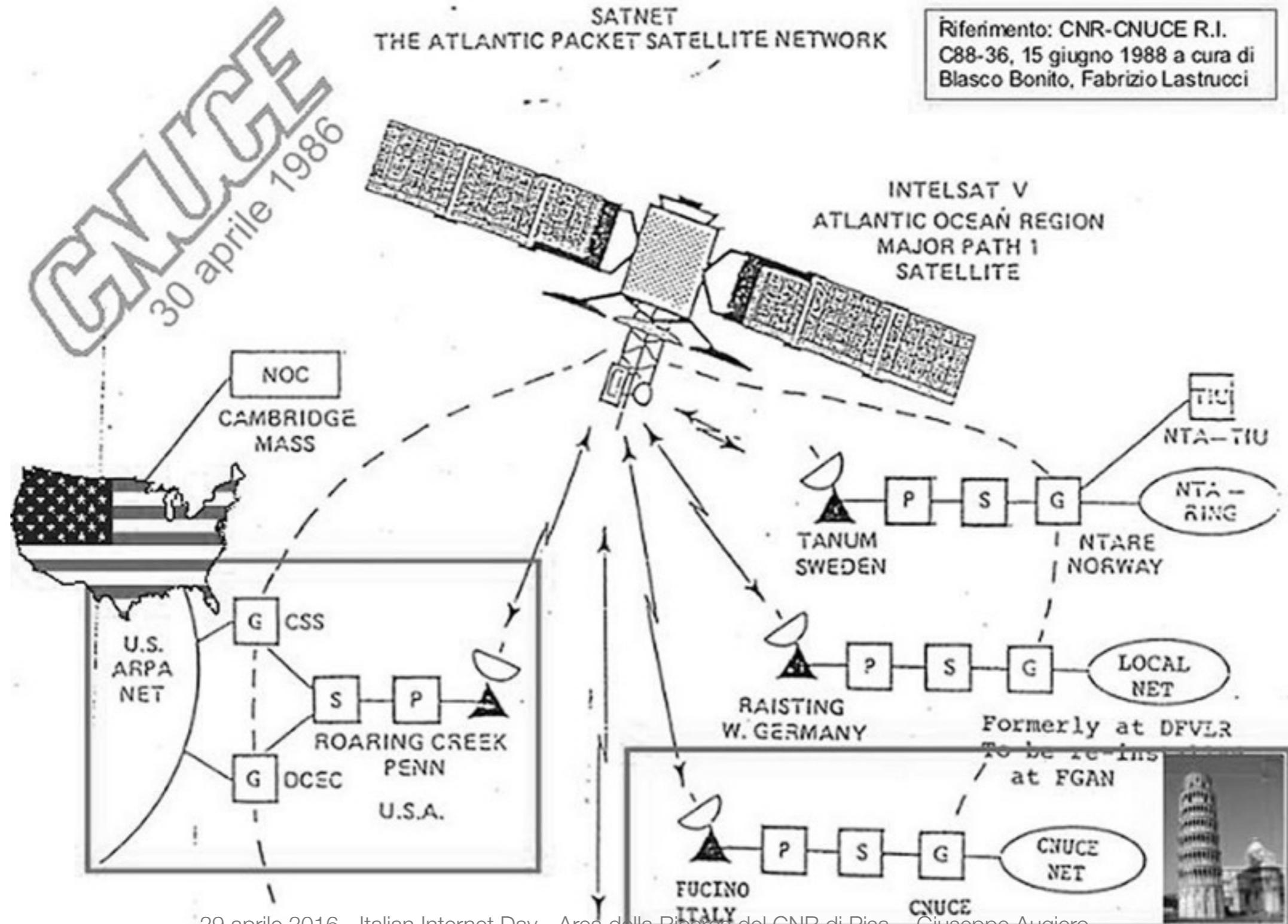
- Transmits raw bit stream over a physical medium



Cerf e Kahn



In Italia?



Funziona?

```
Risposta da 192.168.100.1: byte=32 durata=151ms TTL=126
Risposta da 192.168.100.1: byte=32 durata=148ms TTL=126
Risposta da 192.168.100.1: byte=32 durata=148ms TTL=126
Risposta da 192.168.100.1: byte=32 durata=147ms TTL=126
Risposta da 192.168.100.1: byte=32 durata=148ms TTL=126
Risposta da 192.168.100.1: byte=32 durata=156ms TTL=126
Risposta da 192.168.100.1: byte=32 durata=148ms TTL=126
Risposta da 192.168.100.1: byte=32 durata=148ms TTL=126
Risposta da 192.168.100.1: byte=32 durata=147ms TTL=126
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Risposta da 192.168.100.1: byte=32 durata=147ms TTL=126
Risposta da 192.168.100.1: byte=32 durata=203ms TTL=126
Risposta da 192.168.100.1: byte=32 durata=147ms TTL=126
Risposta da 192.168.100.1: byte=32 durata=148ms TTL=126
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Risposta da 192.168.100.1: byte=32 durata=147ms TTL=126
```

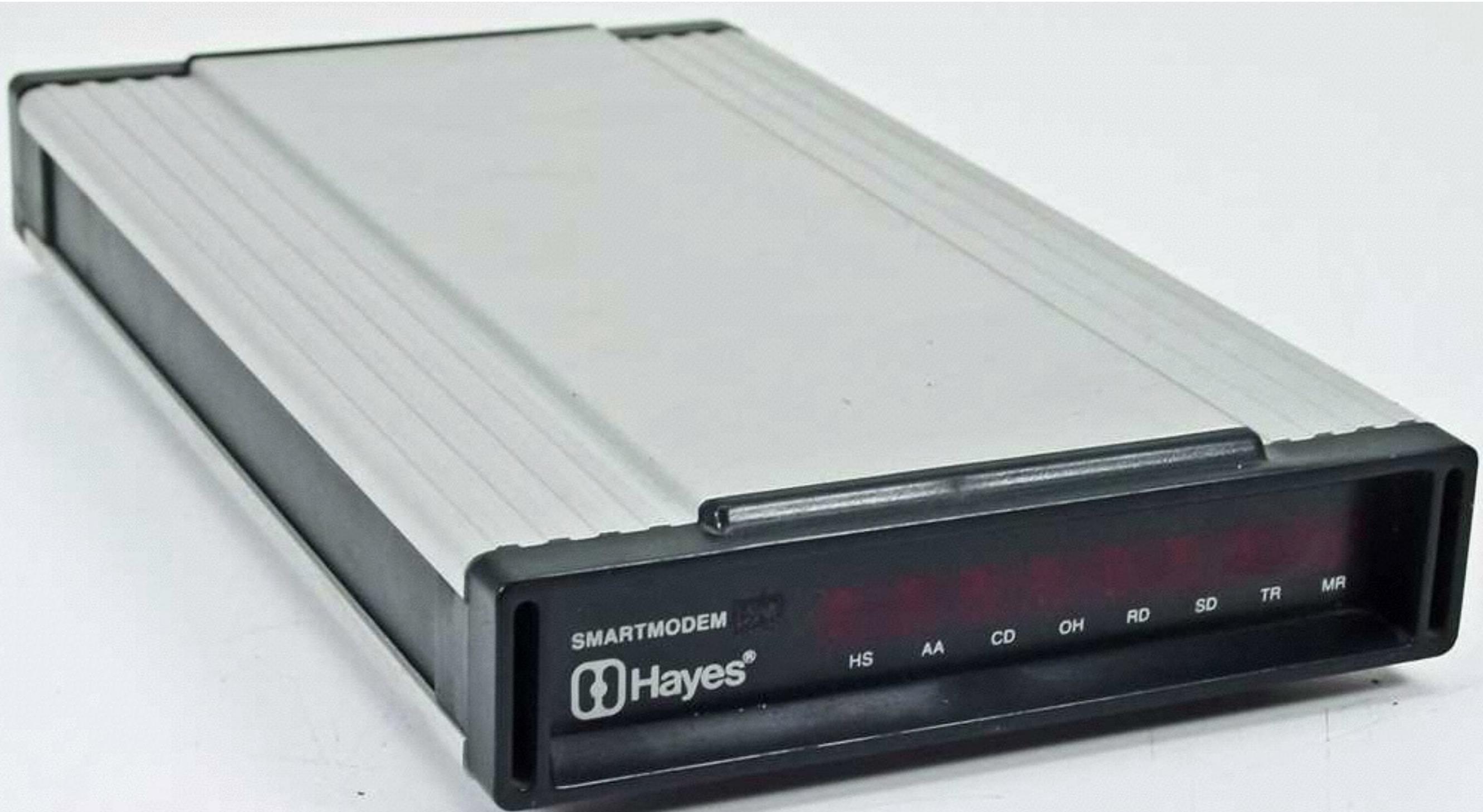
TLD .it

Registro **it**

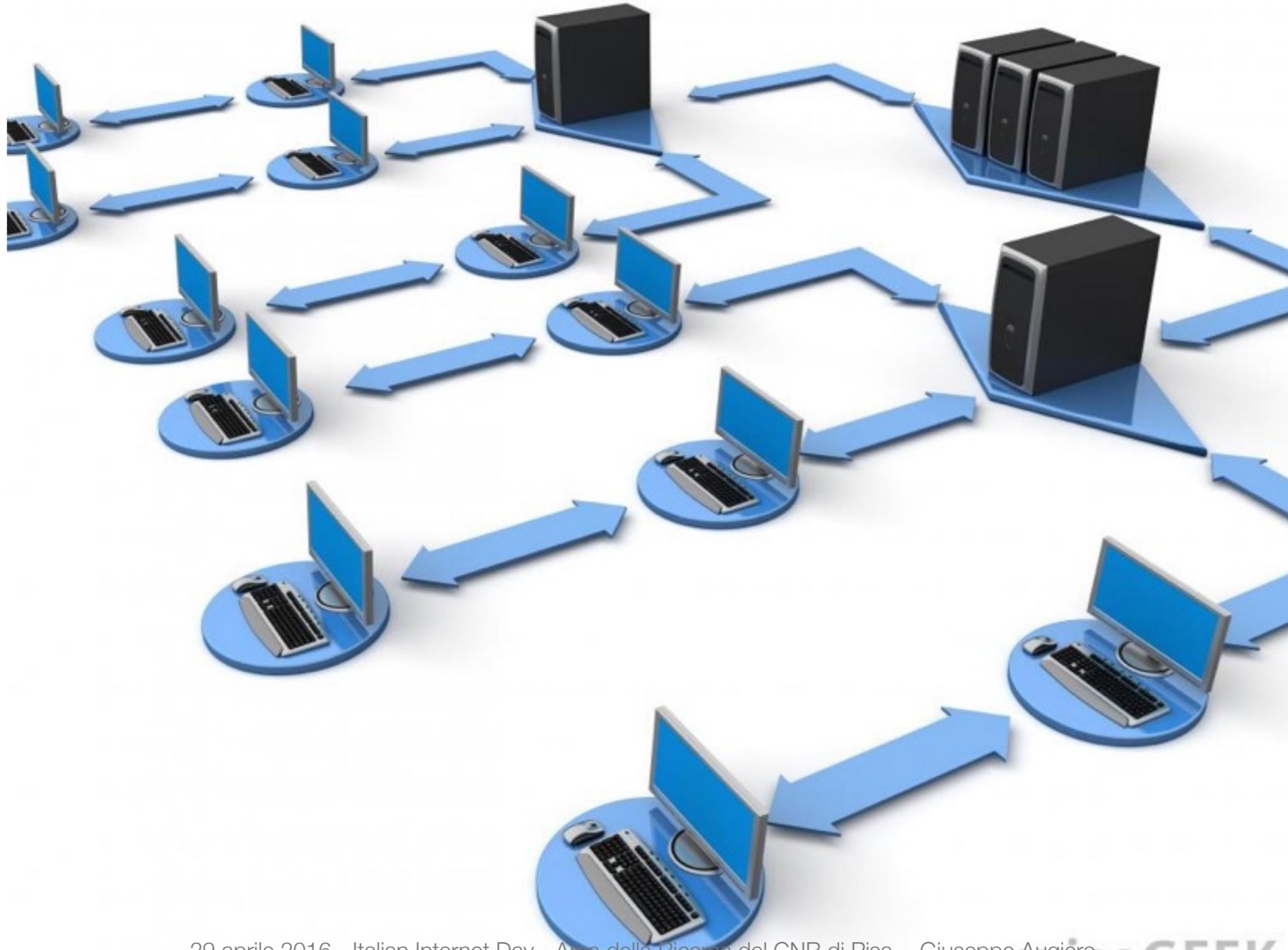
Segreto Militare



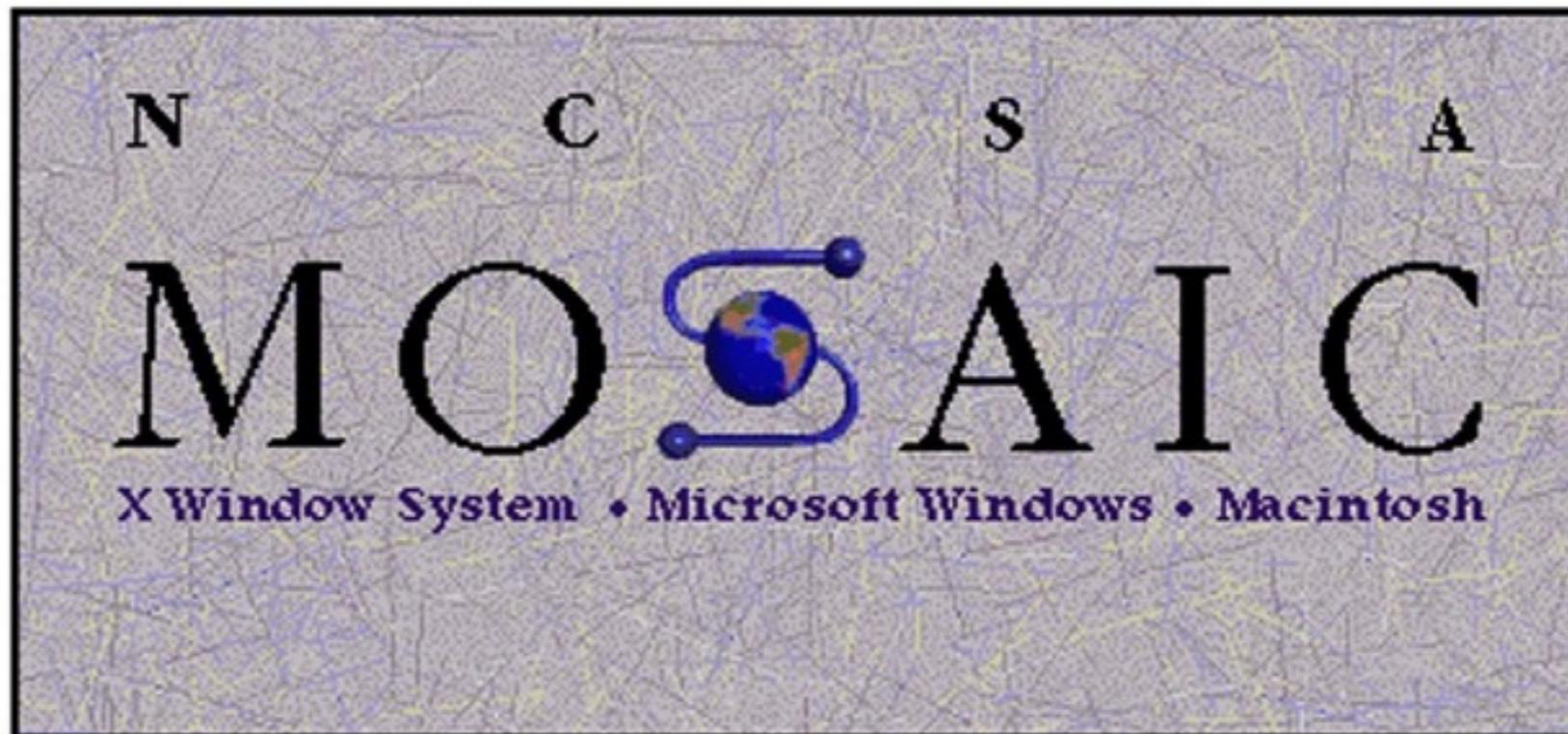
Come connettersi



Packet Switching



Mosaic



Welcome to NCSA Mosaic, an Internet information browser and [World Wide Web](#) client. NCSA Mosaic was developed at the [National Center for Supercomputing Applications](#) at the [University of Illinois](#) in Urbana-Champaign. NCSA Mosaic software is [copyrighted](#) by The Board of Trustees of the University of Illinois (UI), and ownership remains with the UI.

web.Archive.org

The screenshot shows the Wayback Machine website. At the top left, there is a logo for 'INTERNET ARCHIVE' with a classical building icon. To the right, the 'WayBackMachine' logo is displayed in a stylized red and black font. Below the logo, a navigation bar contains links: 'Web', 'Moving Images', 'Texts', 'Audio', and 'Patron Info'. A secondary bar below that includes 'Researcher Access', 'FreeCache', 'SELog', and 'Open Source Media'. A search bar is present with the text 'Wayback Machine' and a 'GO!' button. The user is identified as 'Anonymous User'. The main content area is divided into two columns. The left column, titled 'About the Wayback Machine', contains a paragraph explaining the service and a link to a mirror at 'http://archive.bibalex.org'. The right column, titled 'The Wayback Machine', features a search input field containing 'http://www.bju.edu', a 'Take Me Back' button, and a link to 'Advanced Search'. Below this is the 'Recall' logo with the text 'Full text search' and a 'New!' announcement about searching 11 billion pages, accompanied by another search input field and a 'Go!' button. At the bottom, a section titled 'Take The Wayback Machine With You' provides instructions on how to use the service in a browser, including a link to 'Wayback'.

INTERNET ARCHIVE
WayBackMachine

Web | Moving Images | Texts | Audio | Patron Info

Researcher Access | FreeCache | SELog | Open Source Media

Search:

Anonymous User (last 10 min)

About the Wayback Machine

Browse through 30 billion web pages archived from 1996 to a few months ago. To start surfing the Wayback, type in the web address of a site or page where you would like to start, and press enter. Then select from the archived dates available. The resulting pages point to other archived pages as close a date as possible. Keyword searching is not currently supported, but there are some researcher tools that perform similar functions (see the researcher tool section).

<http://archive.bibalex.org>, the Internet archive at the New Library of Alexandria, Egypt, mirrors the Wayback Machine. Try your search there when you have trouble connecting to the Wayback servers.

The Wayback Machine

INTERNET ARCHIVE
WayBackMachine

[Advanced Search](#)

Full text search
Recall

New! Search the text of 11 billion pages in the Web Archive

[Advanced Search](#) | [About Recall](#) | Recall is in **beta**

Take The Wayback Machine With You

Put the Wayback Machine right in your browser!

The Wayback Machine Bookmarks

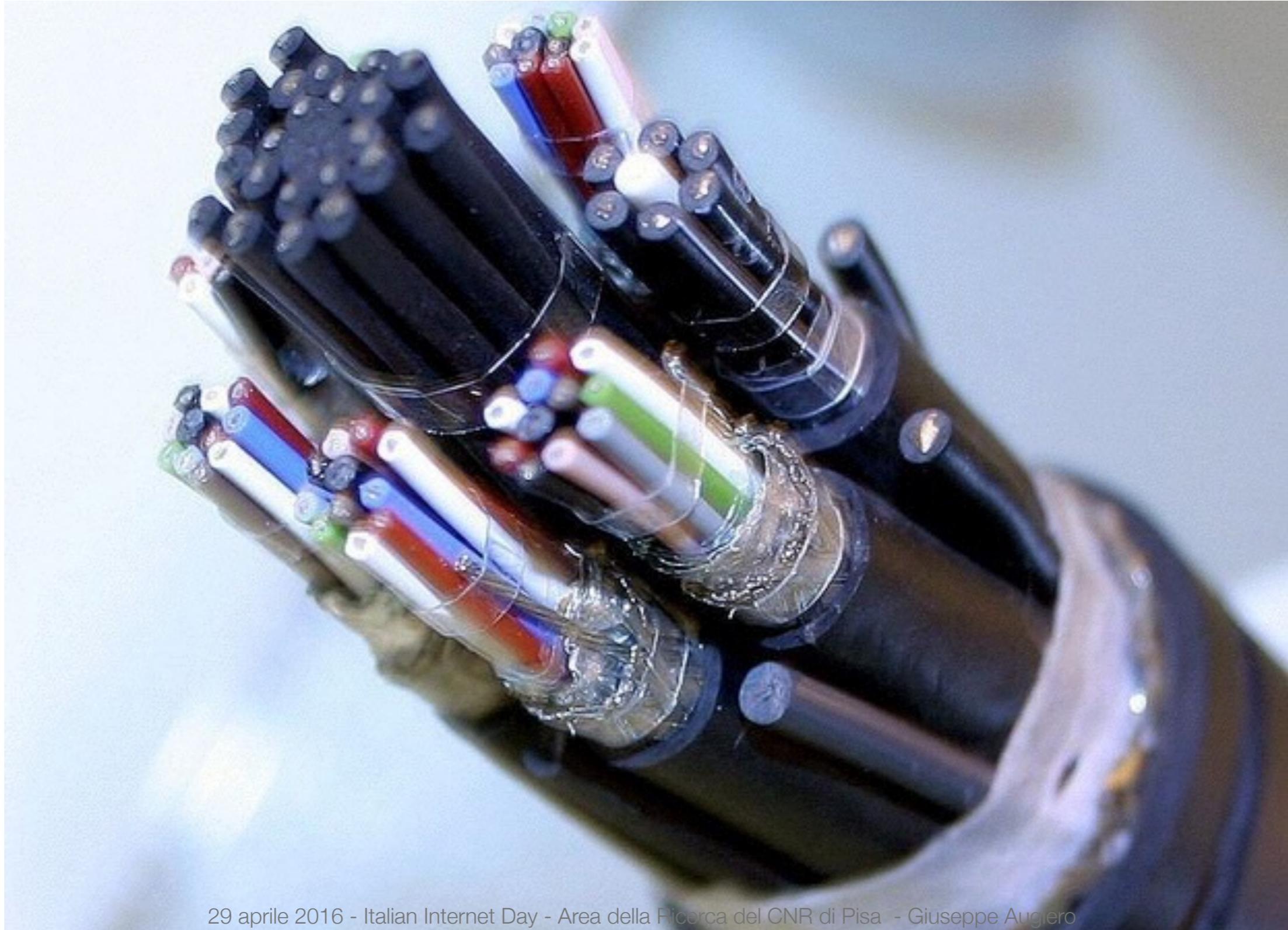
Drag this link to your browser's toolbar: [Wayback](#)

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Oggi

**Nel 2015 gli utenti
connessi a Internet
sono 3,3 miliardi**

Fibra ottica



Neutralità della rete

NET NEUTRALITY

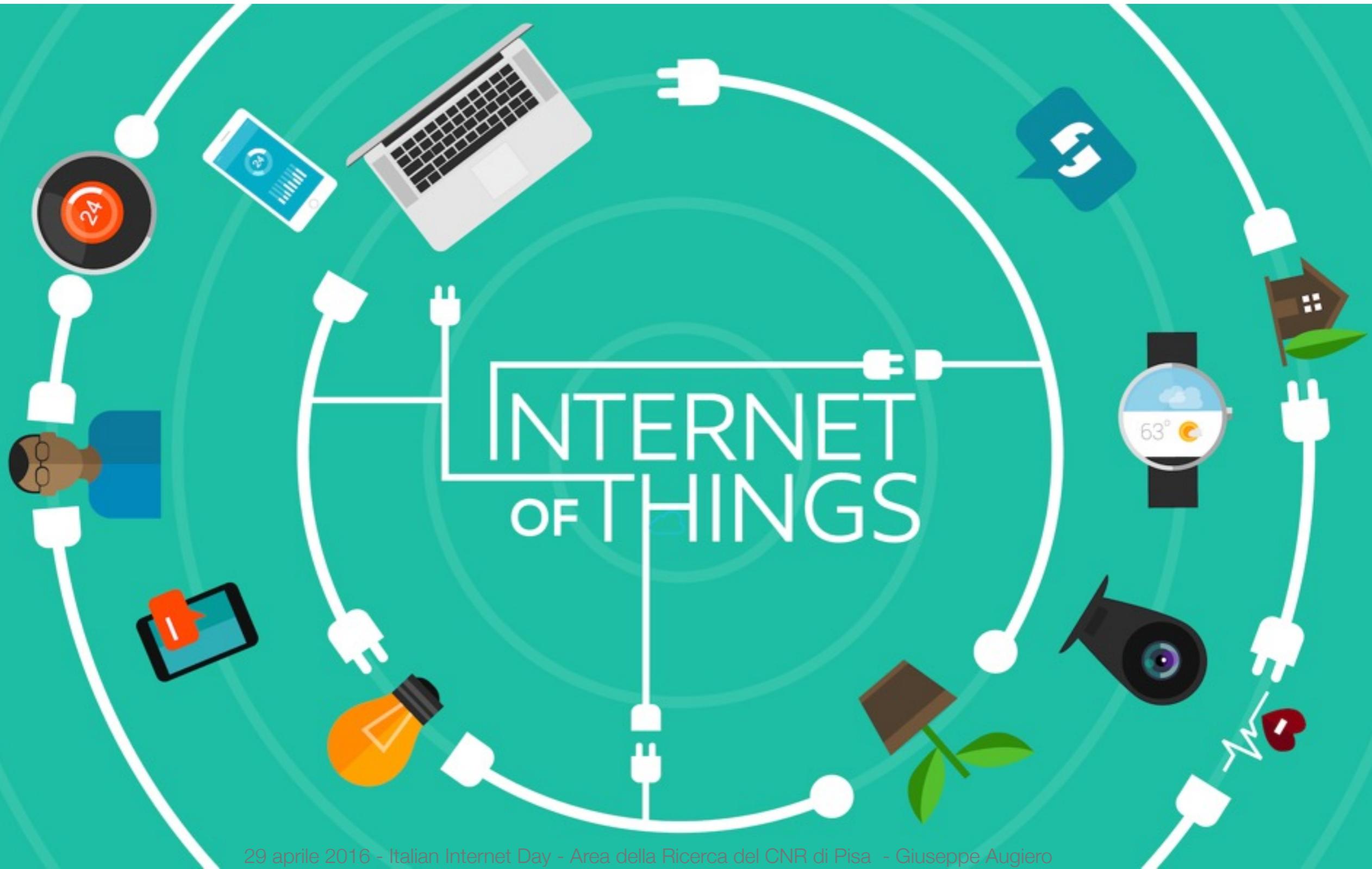
ALL BITS ARE CREATED EQUAL

It's not just a good idea,
It ought to be the LAW.

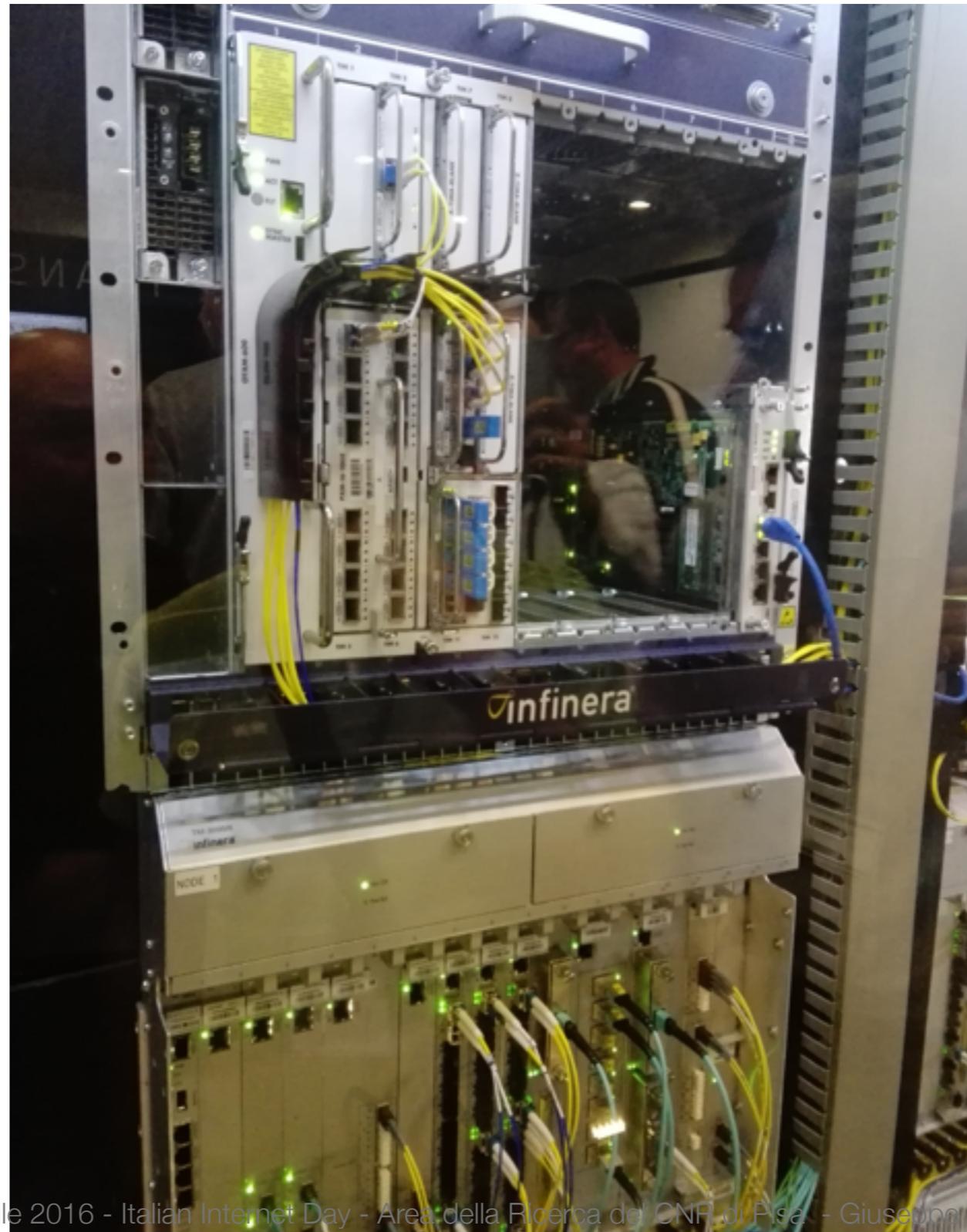
Esigenza di comunicare



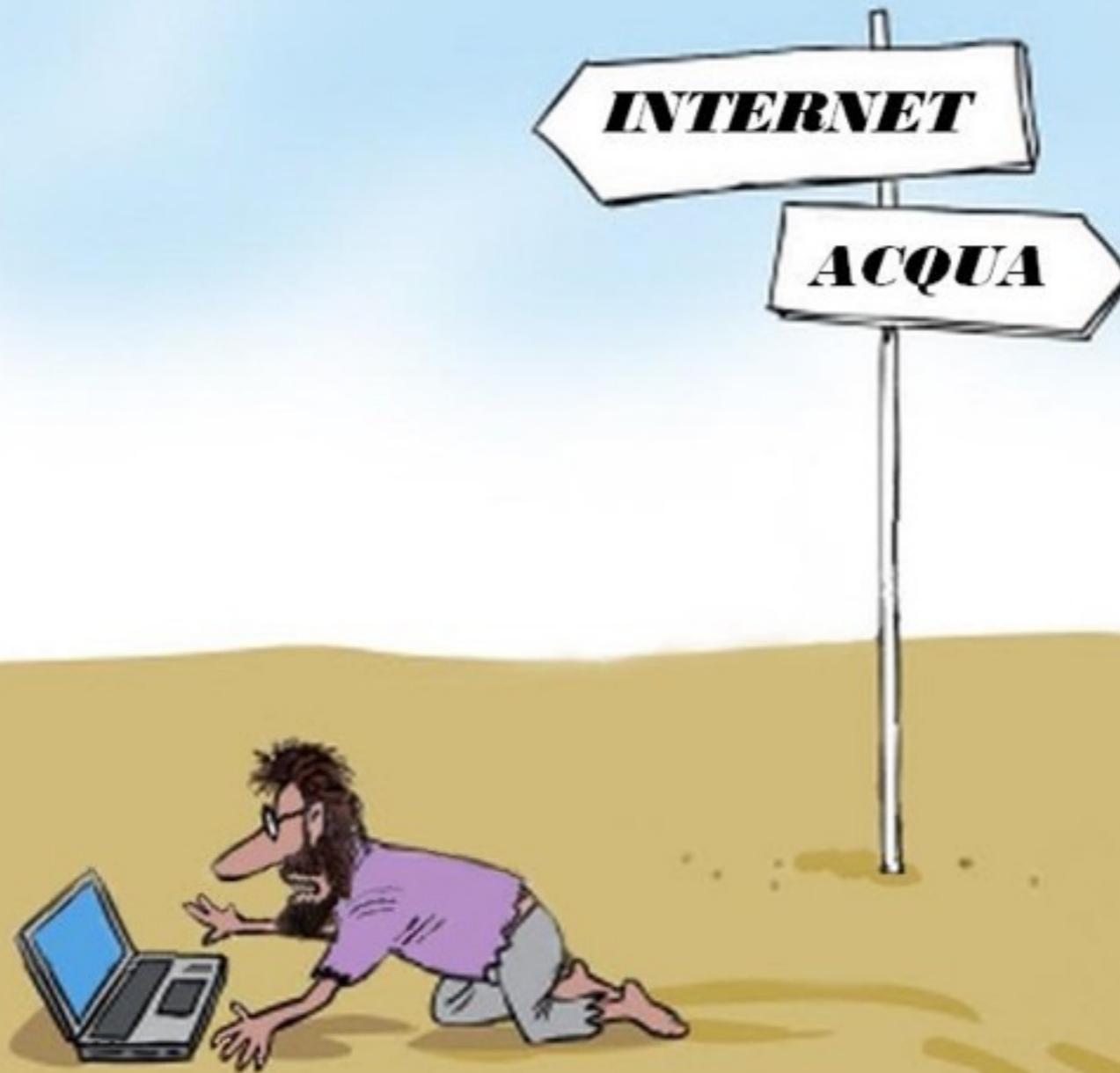
IoT



1Tb/s



Conclusioni



Hashtag

#Consapevolezza



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