

Nástroje a možnosti internetu

Úvodní organizační hodina

22. 9. 2023

Kdo jsem?

- Tomáš Marek
- *marek@kisk.cz*

- na internetu poprvé v roce 1997
- stabilně od roku 2000+



E+P Studio Connection Meter 5.0.3 [Min] [Max] [Close]

Soubor Úpravy Účet Nástroje Nápoředa

Připojit
 Odpojit
 SMS brána
 Přehledy
 Seřadit hodiny

Uživatel: Admin, aktivní účet: Volny, období: červenec, rok: 2002

Záznamy | Statistiky | Nastavení

Aktuální připojení

Čas připojení.....	00:00:00
Počet jednotek.....	0
Konec jednotky za.....	0
Přijato.....	0.0 KB
Odesláno.....	0.0 KB
Celkem za telefon.....	0.00 Kč
Za zprostředkování.....	0.00 Kč
Suma.....	0.00 Kč

Od 28.6.2002 1:03:06

Čas připojení.....	04:29:54
Počet jednotek.....	272
Přijato.....	51912.2 KB
Odesláno.....	15717.4 KB
Celkem za telefon.....	104.04 Kč
Za zprostředkování.....	0.00 Kč
Suma.....	104.04 Kč

Nylovat

Časové omezení pro výpočet součtů

dnes
 od prvního dne období
 předpoklad pro toto období

Součet provést pro

tento účet
 všechny evidované účty

Výpočet součtu provést pro

vybraného uživatele
 všechny uživatele

červenec 2002, všechny účty, všichni

Čas připojení.....	01:23:03
Počet spojení.....	7
Počet jednotek.....	84
Přijato.....	9993.3 KB
Odesláno.....	3730.0 KB
Celkem za telefon.....	39.36 Kč
Za zprostředkování.....	0.00 Kč
Suma.....	39.36 Kč

Modem není aktivní. Neodeslané SMS: 0

E+P Studio Connection Meter 5.0.3

Soubor Úpravy Účet Nástroje Nápoředa

Připojit Odpojit SMS brána Přehledy Seřadit hodiny

Uživatel **Admin**, aktivní účet **Volny**, období **červenec**, rok **2002**

Záznamy Statistiky **Nastavení**

Aktuální připojení		Časové omezení pro výpočet součtů	
Čas připojení.....	00:00:00	<input type="radio"/> dnes	
Počet jednotek.....	0	<input checked="" type="radio"/> od prvního dne období	
Konec jednotky za.....	0	<input type="radio"/> předpoklad pro toto období	
Přijato.....	0.0 KB	Součet provést pro	
Odesláno.....	0.0 KB	<input type="radio"/> tento účet	
Celkem za telefon.....	0.00 Kč	<input checked="" type="radio"/> všechny evidované účty	
Za zprostředkování.....	0.00 Kč	Výpočet součtu provést pro	
Suma.....	0.00 Kč	<input type="radio"/> vybraného uživatele	
		<input checked="" type="radio"/> všechny uživatele	
Od 28.6.2002 1:03:06		červenec 2002, všechny účty, všichni	
Čas připojení.....	04:29:54	Čas připojení.....	01:23:03
Počet jednotek.....	272	Počet spojení.....	7
Přijato.....	51912.2 KB	Počet jednotek.....	84
Odesláno.....	15717.4 KB	Přijato.....	9993.3 KB
Celkem za telefon.....	104.04 Kč	Odesláno.....	3730.0 KB
Za zprostředkování.....	0.00 Kč	Celkem za telefon.....	39.36 Kč
Suma.....	104.04 Kč	Za zprostředkování.....	0.00 Kč
	<input type="button" value="Nulovat"/>	Suma.....	39.36 Kč

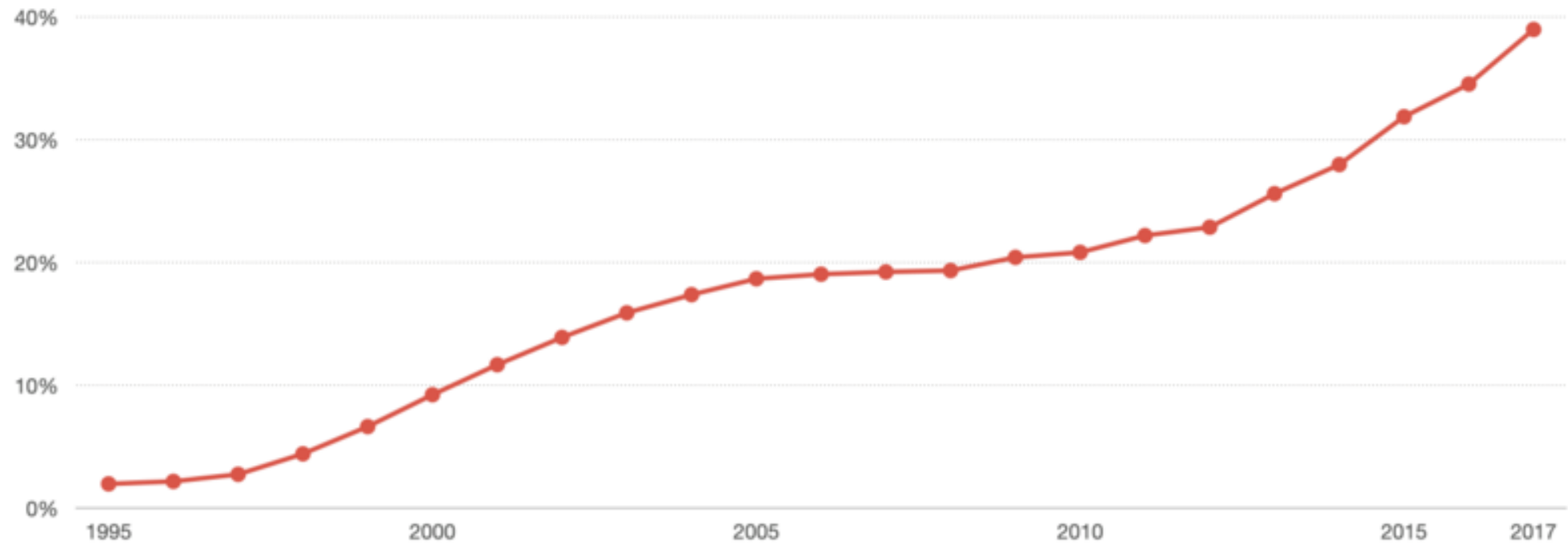
Modem není aktivní. Neodeslané SMS: 0



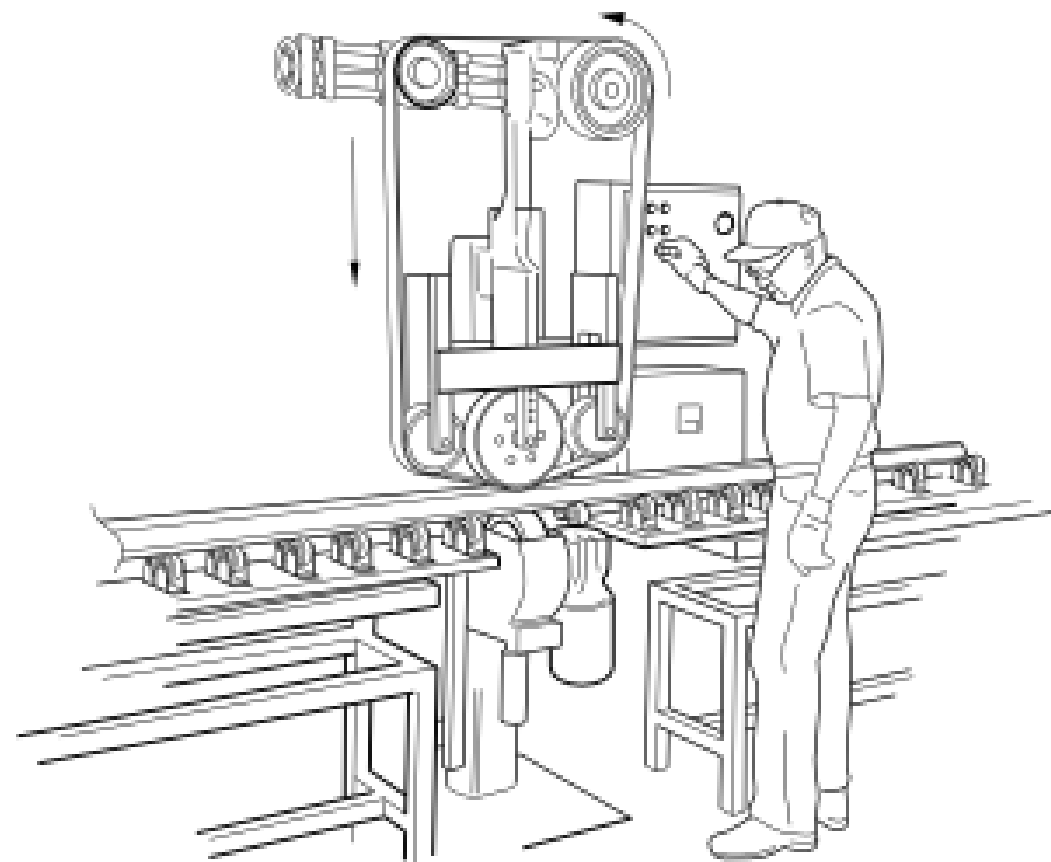
I was there. 3,000 years ago...

V kterém roce (*zhruba*)
jste poprvé pracovali
s internetem?





Source: Stanford/GfK



I. INTRODUCTION

A. Symbiosis

THE fig tree is pollinated only by the insect *Blastophaga grossorum*. The larva of the insect lives in the ovary of the fig tree, and there it gets its food. The tree and the insect are thus heavily interdependent: the tree cannot reproduce without the insect; the insect cannot eat without the tree; together, they constitute not only a viable but a productive and thriving partnership. This cooperative “living together in intimate association, or even close union, of two dissimilar organisms” is called symbiosis.¹

Man-Computer Symbiosis*

J. C. R. LICKLIDER†

Summary—Man-computer symbiosis is an expected development in cooperative interaction between men and electronic computers. It will involve very close coupling between the human and the electronic members of the partnership. The main aims are 1) to let computers facilitate formulative thinking as they now facilitate the solution of formulated problems, and 2) to enable men and computers to cooperate in making decisions and controlling complex situations without inflexible dependence on predetermined programs. In the anticipated symbiotic partnership, men will set the goals, formulate the hypotheses, determine the criteria, and perform the evaluations. Computing machines will do the routinizable work that must be done to prepare the way for insights and decisions in technical and scientific thinking. Preliminary analyses indicate that the symbiotic partnership will perform intellectual operations much more effectively than man alone can perform them. Prerequisites for the achievement of the effective, cooperative association include developments in computer time sharing, in memory components, in memory organization, in programming languages, and in input and output equipment.

I. INTRODUCTION

A. Symbiosis

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"Man-computer symbiosis" is a subclass of man-machine systems.² There are many man-machine systems. At present, however, there are no man-computer symbioses. The purposes of this paper are to present the concept and, hopefully, to foster the development of man-computer symbiosis by analyzing some problems of interaction between men and computing machines, calling attention to applicable principles of man-machine engineering, and pointing out a few questions to which research answers are needed. The hope is that, in not too many years, human brains and computing machines

will be coupled together very tightly, and that the resulting partnership will think as no human brain has ever thought and process data in a way not approached by the information-handling machines we know today.

B. Between "Mechanically Extended Man" and "Artificial Intelligence"

As a concept, man-computer symbiosis is different from an important way from what North² has called "mechanically extended man." In the man-machine systems of the past, the human operator supplied the direction, the integration, and the criteria. The mechanical parts of the systems were mere extensions of the human arm, then of the human eye, and then of the human ear. The man-machine systems certainly did not consist of "dissimilar organisms living together . . ." There was only one organism—man—and the rest was there only to help him.

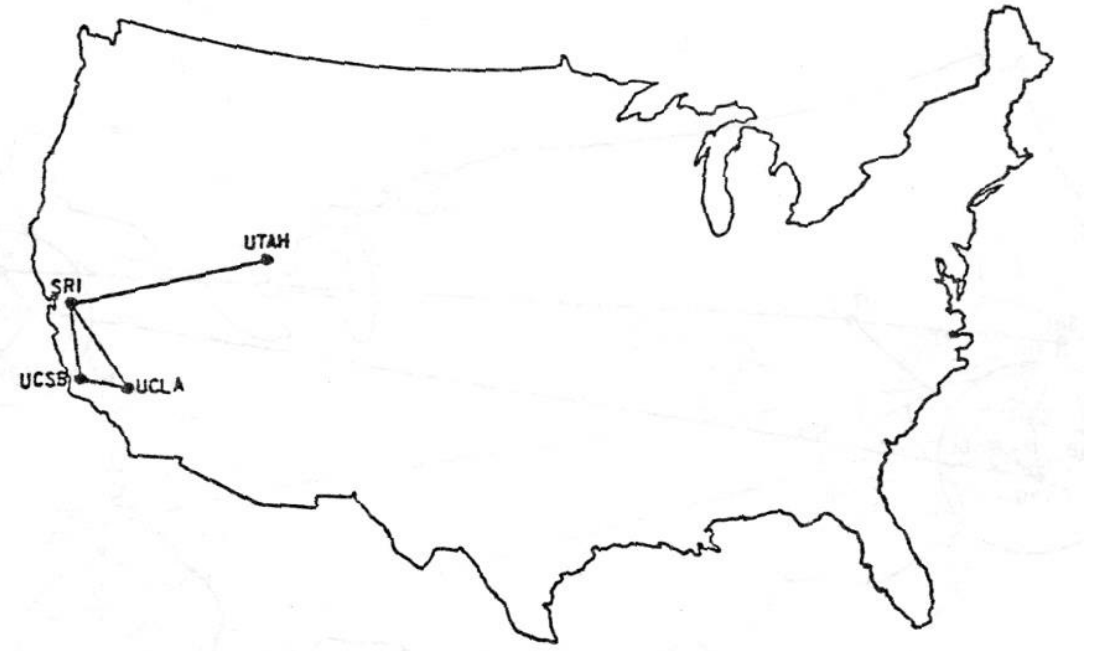
In one sense of course, any man-made system intended to help man, to help a man or men or a group of men, is a man-machine system. If we focus upon the human operator as the system, however, we see that, in some areas, a fantastic change has taken place in the last few years. "Mechanical extension" has given way to replacement of men, to automation, and the human operators that remain are there more to help than to be hindered. In some instances, particularly in large computer information and control systems, the human operators are responsible mainly for functions that it is not feasible to automate. Such systems ("humanly extended machines," North might call them) are not man-machine systems. They are "semi-automatic" systems, that started out to be fully automatic but fell short of the goal.

Man-computer symbiosis is probably not the paradigm for complex technological systems. It is entirely possible that, in due course, electronic "machines" will outdo the human brain in most of the functions we now consider exclusively within its province. Even now, Gelernter's IBM-704 program for proving theorems in plane geometry proceeds at about the same pace as Brooklyn high school students, and

It seems reasonable to envision, for a time 10 or 15 years hence, a "thinking center" that will incorporate the functions of present-day libraries together with anticipated advances in information storage and retrieval and the symbiotic functions suggested earlier in this paper. The picture readily enlarges itself into a network of such centers, connected to one another by wide-band communication lines and to individual users by leased-wire services. In such a system, the speed of the computers would be balanced, and the cost of the gigantic memories and the sophisticated programs would be divided by the number of users.

Kde se vzal?

- Man-Computer Symbiosis (*Joseph C. R. Licklider, 1960*)
- 1962 - *Galactic Network*
- DARPA – 1967 – ARPANET
- *malé sítě, time-sharing*
- *přepojování paketů*



The ARPANET in December 1969

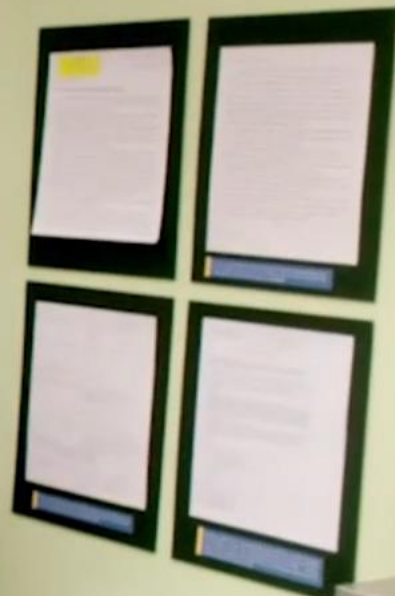
Kde se vzal?

- *UCLA-SRI*
- LOGIN
- *„Hence, the first message on the Internet was 'LO' — as in 'Lo and behold!'. We didn't plan it, but we couldn't have come up with a better message: short and prophetic.“ - Leonard Kleinrock*

WPA MILITARY & ELECTRONIC ENGINEERING
AND FACILITIES
RESEARCH OF THE NATIONAL CENTER
FOR
RESEARCH & DEVELOPMENT
OF THE
ARMY
RESEARCH
OFFICE
DURHAM
NORTH CAROLINA
27709-5000
WWW.RDRL.MIL



BRUIN



COMPANY

ADDRESS

IMP LOG

MONTH OF

ENGINEER IN CHARGE

COMPUTER SERIAL NO.

DATE	METER	PROBLEM & REMEDY	OPERATOR	DOWNTIME
29 Oct 69	1750	IMP1ST RUNNING - TESTING LINE TO UCSB - LINE IS OPEN SO 'B' REG IS COUNTING ERRORS BUT SHOULD CEASE COUNTING IF TEL. CO. GETS LINE FIXED. CHARLEY PLEASE CALL BEN AT SRI!	T. TRACH	
29 Oct 69	2100	LOADED OP. PROGRAM FOR BEN BARKER BBV	CSK	
	22:30	Talked to SRI host to host	CSK	
		Left op. imp. programs running after sending a host dead message to imp.	CSK	
30 Oct 69	1030	Stopped op. prog started IMP1ST to trace line trouble on TGIW (UCSB)	T. TRACH	

CUSTOMER SERVICE

SDS-S-324

DEPARTMENT

LEONARD KLEINROCK

POLT BERANEK AND NEV
CONSULTING DEVELOPMENT

30 March 1970

2

FLOW

Kde se vzal?

- národní sítě, občasná mezinárodní spolupráce
- desítky let rozvoje technologií a protokolů
- *budeme o nich mluvit, když to budeme potřebovat*
- e-mail (*Ray Tomlinson*)



Kde se vzal?

- pozdní 80 léta – první ISP
- komerční využití (*a „nadšení“ vědců*)
- TheWorld.com - 1989
- HTTP, HTML, URL
- *www* – web – primární nástroj interakce na internetu
- *Tim Berners-Lee*

WYSIWYG

The screenshot shows the NextStep WorldWideWeb browser interface. The main window displays the GNU Project website, which includes the text "Free as in Freedom" and a welcome message from the GNU Project web server. An "Info" window is open, providing details about the browser's version (2.02 with libwww 2.16pre1) and its history as the original WorldWideWeb program by Tim Berners-Lee. The browser's menu bar includes "WorldWideWeb", "Style", "Document", "Navigate", and "Find". A "Mark/Inspect" dialog box is also visible, showing options for "Selection", "Link destination", and "Image".

GNU Operating System - Free Software Foundation (FSF)
 FSF | [FSF Europe](#) | [FSF India Translations](#) of this page

GNU Operating System - Free Software Foundation

[Free as in Freedom](#)

Welcome to the GNU Project web server, www.gnu.org. The [GNU Project](#) was launched in 1984 to develop a complete UNIX style operating system which is [free software](#): the GNU system. (GNU is a recursive acronym for "GNU's Not UNIX"; it is pronounced "guh-noo.") Variants of the GNU operating system, which use the kernel Linux, are now widely used; though these systems are often referred to as "Linux"; they are more accurately called [GNU/Linux systems](#).

This is also the web site of the [Free Software Foundation](#) (FSF). FSF is the principal organizational sponsor of the GNU Project. FSF receives very little funding from corporations or grant-making foundations. We rely on support from individuals like you who support FSF's mission to preserve, protect and promote the freedom to use, study, copy, modify, and redistribute computer software, and to defend the rights of Free

Info
 Version: 2.02 with libwww 2.16pre1
 exercise in global information availability
 original WorldWideWeb program by Tim Berners-Lee
 Copyright 1990,91,93,94, TBL, CERN. Distribution restricted: ask for terms.
 Text: Text which is not constrained to be linear.
 Media: Information which is not constrained linear... or to be text.

This is a new version of the NextStep WorldWideWeb application with the libWWW library. Bug reports to timbl@info.cern.ch, quoting the version information above. Check the list of known bugs in the web too.

This was the original prototype for the World-Wide Web. Many browsers for other platforms now exist (Read the web for details). After many years lying fallow, this application has now sprouted images and nested HTML elements and things. If you have an Internet connection, then using "Help" under the Info menu will tell you all about this application. If you don't have an internet connection -- get one! :-)

If you want to be able to read news, you should set the name of your local news server in the preferences.

WorldWideWeb	Style	Document	Navigate	Find
Info	Copy style	Open file...	Back	Find Panel...
Navigate	Apply style	Open given document address	Next	Find Next
Document	Address	New file...	Previous	Find Previous
Find	Lists	Respond	Home	Enter Selection
Edit	Glossary	Save	Panel...	Jump to Selection
Links	Example	Save all edited windows	Links	
Style	Normal	Save a copy in	Mark all	
Print...	Heading 1	Inspect ...	Mark selection	
Page layout...	Heading 2	Diagnostics)	Link to marked	
Windows	Heading 3	Miniaturize	Link to New	
Services	Heading 4	Open master template document	Unlink	
Hide	Format	Close all other windows	Link to file...	
Quit	Panel...	Close	Help	

Mark/Inspect
 Selection Link destination Image

Change
 Link selection to marked Insert image

relationship (none)

Marked:
 Address:

Open

browser wars

O čem to nebude?

technikálie

protokoly

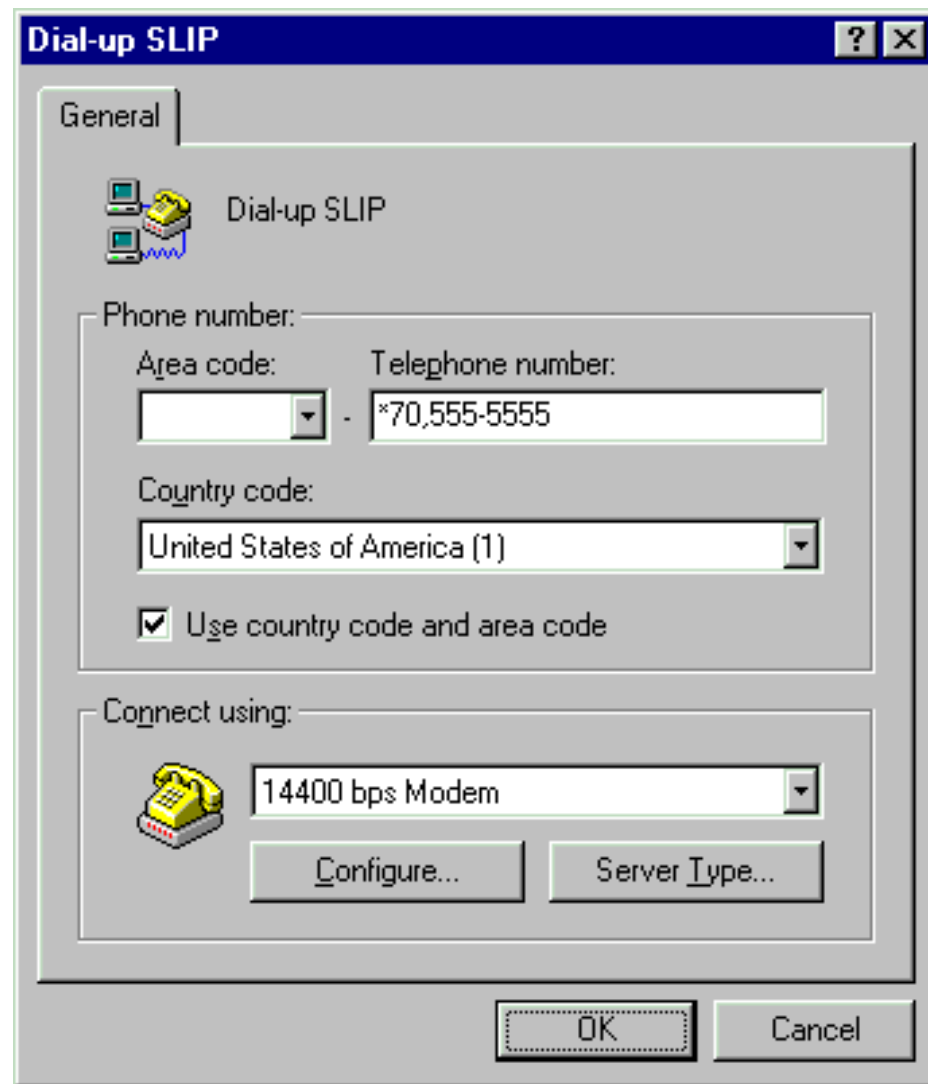
historický vývoj

osobní HLP

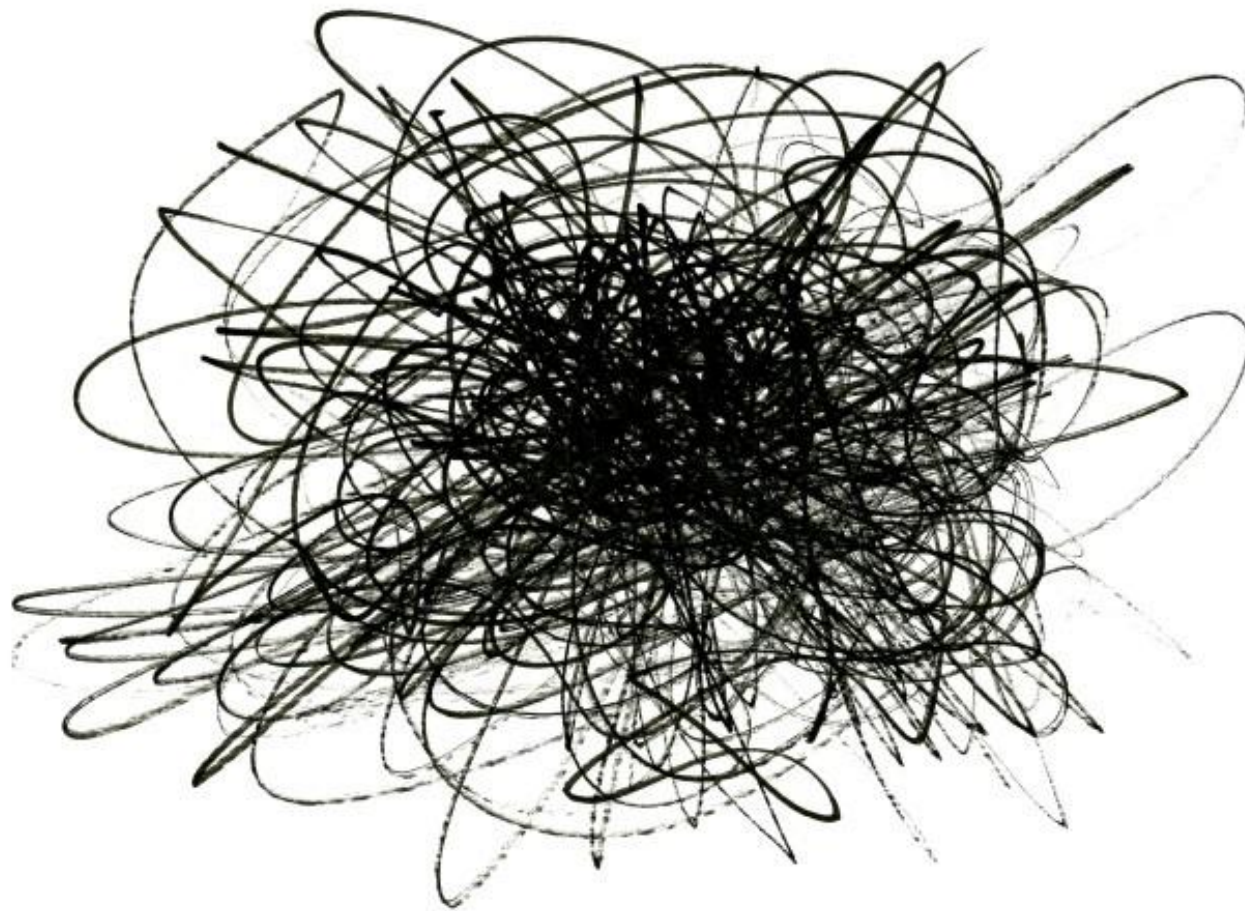
rituál připojení

internet proti monopolu

P2P sítě



Co čekáte?



muni.cz/go/nami23

Jak to pojmem?

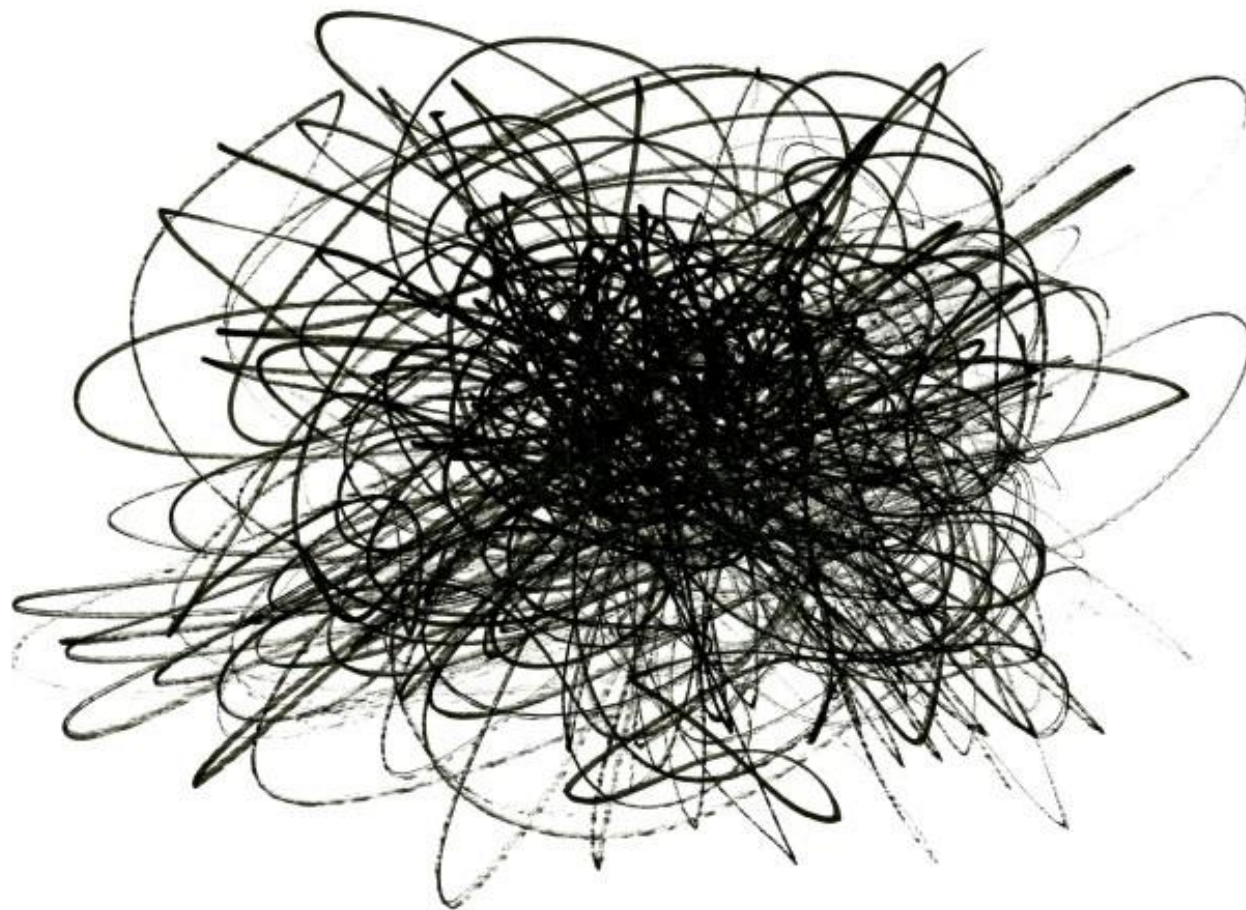
- 2005: Předmět si klade za cíl uvést studenty do problematiky využívání sítě Internet a dostupných služeb. Podrobněji se zaměřuje na některé aktuální problémy služby World Wide Web. Studenti si procvičí vytváření HTML dokumentů pro službu WWW.

Jak to pojme?

- *základy, teorie, problematika*
- aktuální témata
- občasný nástrojový/technický přístup

- ➔ 2. Síťová neutralita
- ➔ 3. Publikování na internetu
- ➔ 4. Organizace webu
- ➔ 5. Rekompozice a demetrikace
- ➔ 6. Internet jako nástroj sledování I.
- ➔ 7. Internet jako nástroj sledování II.
- ➔ 8. Hlubší vrstvy internetu I.
- ➔ 9. Hlubší vrstvy internetu II.
- ➔ 10. Remixovat, propojit, seškrábat
- ➔ 11. Závěrečné miniexkurze

Co vás zajímá?



muni.cz/go/nami23

Požadavky na ukončení

- Průběžné úkoly – *občasně mohou být*
- Závěrečná esej a rozprava nad ní
- Kostra předmětu je státnicová
- *Nástrojový Barcamp*
- Docházka

Jak to bude?

- MS Teams + prezenčně
- Interaktivní osnova

internet / Internet

- pravidla českého pravopisu
- obecná počítačová síť = internet
- celosvětová informační a komunikační síť = Internet
- v angličtině to tak jednoznačné není

Domáci úkol



- A Declaration of the Independence of Cyberspace
- *John Perry Barlow*
- 1996 – *Communications Decency Act*