

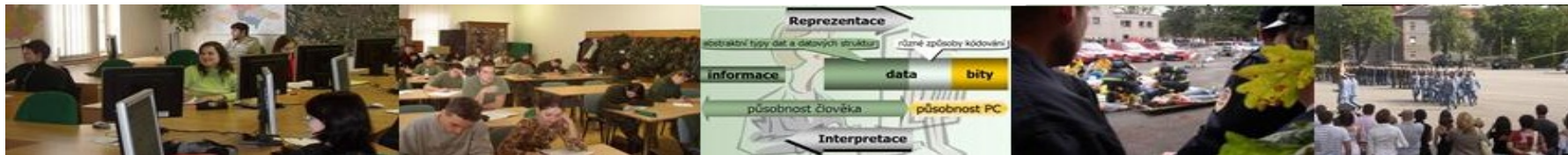
# Applied informatics

Secure remote access to data, secure data sharing, practical examples of security of data storage.

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# Secure remote access to data, secure data sharing, practical examples of security of data storage.

1. Data transmission
2. Data sharing
3. Defence of your case study
- 4. Assignments**



# Aims of the exercise

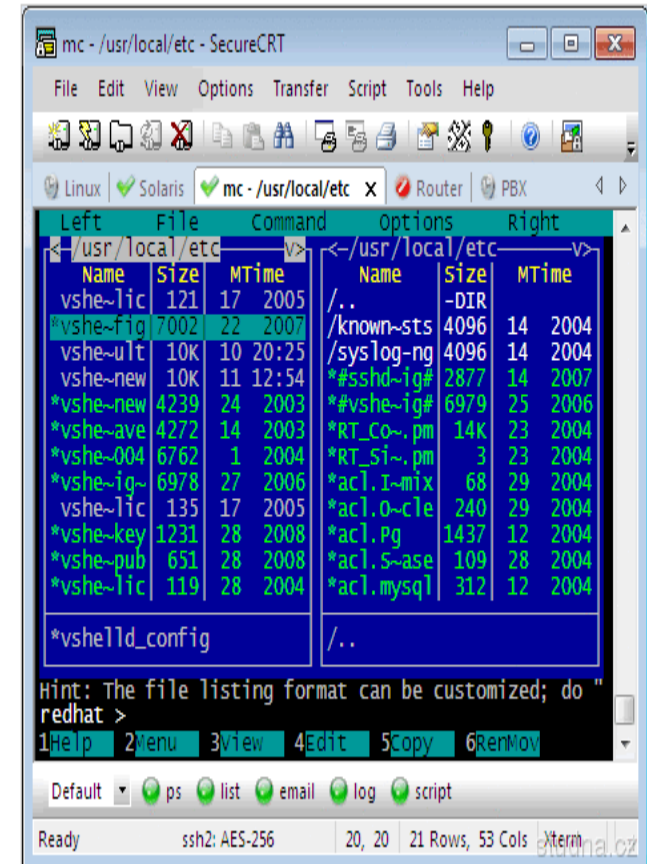
1. Provide students with basic information about the data transmission using remote access.
2. Clarify the sharing of data with the selected SW program.
3. Perform defense of your case study.

# Remote access

- ❑ Remote access allows you to work on another computer on your network or the Internet without the physical presence of the user.
- ❑ For remote access, there are a number of policies and programs with functions enabling data protection, access to a computer behind a firewall ..

# SecureCRT 7.2.0

- ❑ SecureCRT is a 32-bit terminal with support for SSH1, SSH2 (Secure Shell), Telnet, rlogin, and other protocols. Includes all features of standard CRT terminal emulators (automatic login, printing, Xmodem and Zmodem transfer files, Emacs mode, and SOCKS firewall support, ...).
- ❑ It supports port forwarding, X11 forwarding (allows encryption of X Window sessions), different types of compression, increased security (utility VCP), OpenSSH support for formats of private and public keys, compatible X.509 certificates, ...

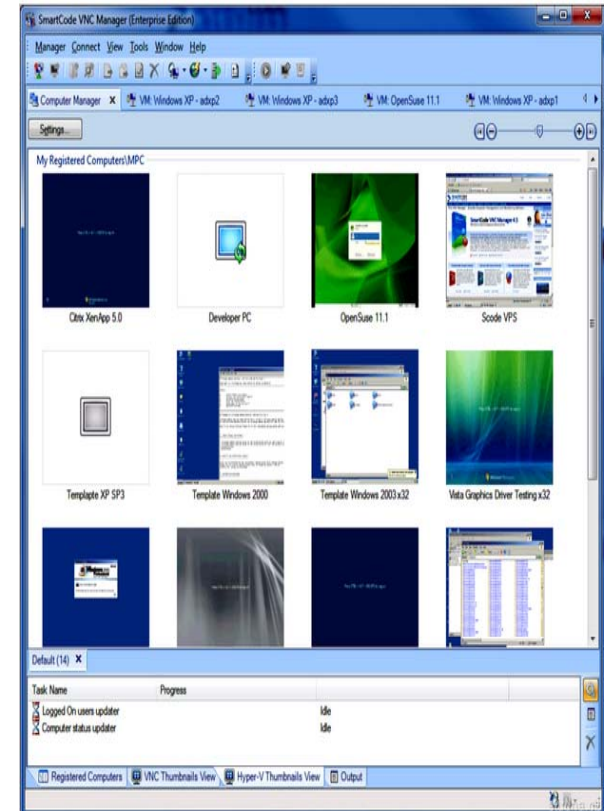


# LogMeIn Free 4.1.0.3888

- ☐ LogMeIn service gives you easy and secure remote access to your computer through a web browser from anywhere.
- ☐ You can also access your computer without public IP address behind a firewall. Security is assured through 256-bit SSL encryption, support for RSA SecurID dual authentication. [1]

# SmartCode VNC Manager Enterprise Edition 6.9.9.0

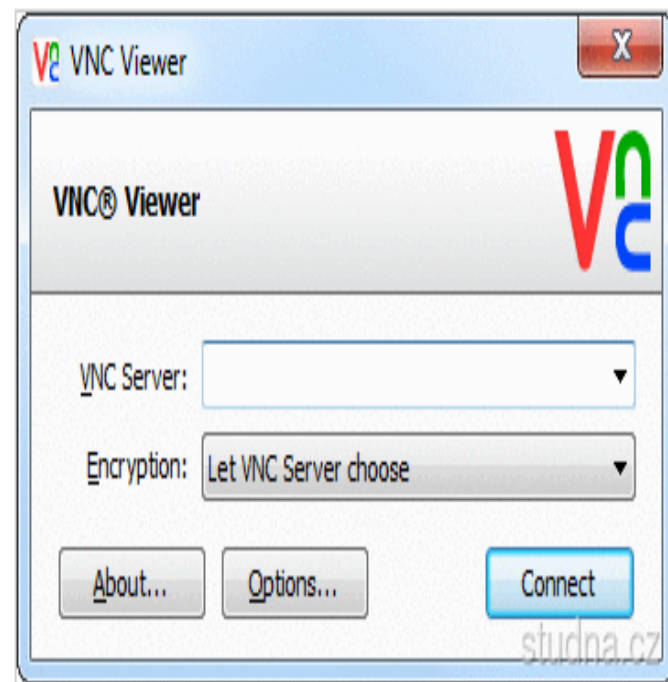
- ❑ Powerful software for remote administration and monitoring network systems and networks for the Help-desk.
- ❑ Can remotely manage any computer running VNC (RealVNC, UltraVNC, TightVNC, ...), Windows Terminal Server, Microsoft Virtual Server 2005 ...
- ❑ Supports SSH tunneling VNC / RDP sessions, UltraVNC NTLM Windows authentication MSRC4 DSM plug-in, UltraVNC Repeater, SOCKS5 proxy servers and HTTP ... [1]





# VNC Free Edition 5.1.0

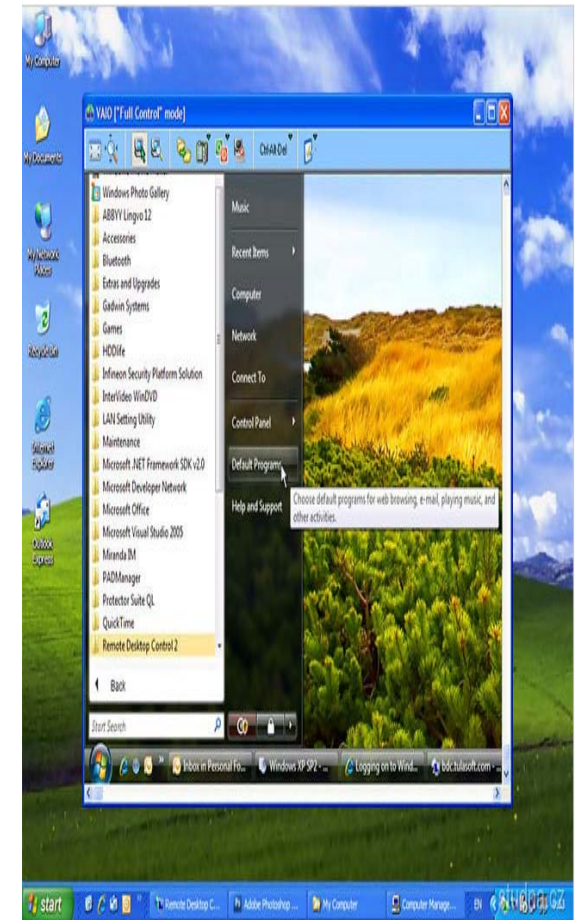
- ❑ VNC allows remote work on computers connected to the network.
  - ❑ The solution is independent on the platform, so you can, for example, from a Windows computer to work on a remote computer or server running Unix.
- [1]





# Remote Desktop Control 4.0.0.21

- ☐ Program allows remote connections to one or more computers together via a local network or the Internet.
- ☐ Displays the remote computer and allows you to work on it just as if you were sitting right at it.
- ☐ The program must be installed on all computers you wish to access. [1]



# TeamViewer 9.0.24322

- ❑ TeamViewer offers a solution for secure file transfer, and remote access to computers connected to the Internet through a firewall and NAT proxy.
- ❑ Just run TeamViewer on both machines without having to install the SW. Data transfer is encrypted, supported by voice and video, simultaneous connection of up to 25 users (presentations, meetings), use multiple monitors and more. [1]



# Anyplace Control 7.0.3.0

- ☐ Program for remote (Network or the Internet) display of the screen of another computer, and to control its keyboard and mouse.
- ☐ You can work with a remote computer as if you were sitting in front of it.
- ☐ Support for multiple computers. It consists of two modules: Admin Module (for control of the remote PC, installed on an administrator computer) and Host Module (installed on each computer you want to connect remotely).[1]



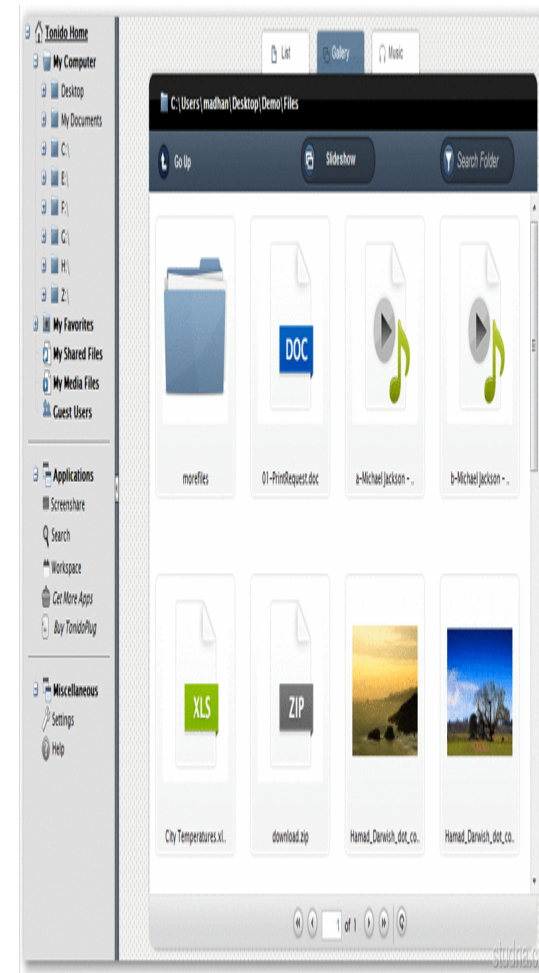
# Data sharing

To share data you have multiple options:

- ☐ Using the remote access
- ☐ Use of public storage
- ☐ Use P2P clients - torrent
- ☐ Use email, communication tools - Skype, ftp ...
- ☐ Off-line using standard storage - CD, USB Flash ...

## ***Tonido 4.70:***

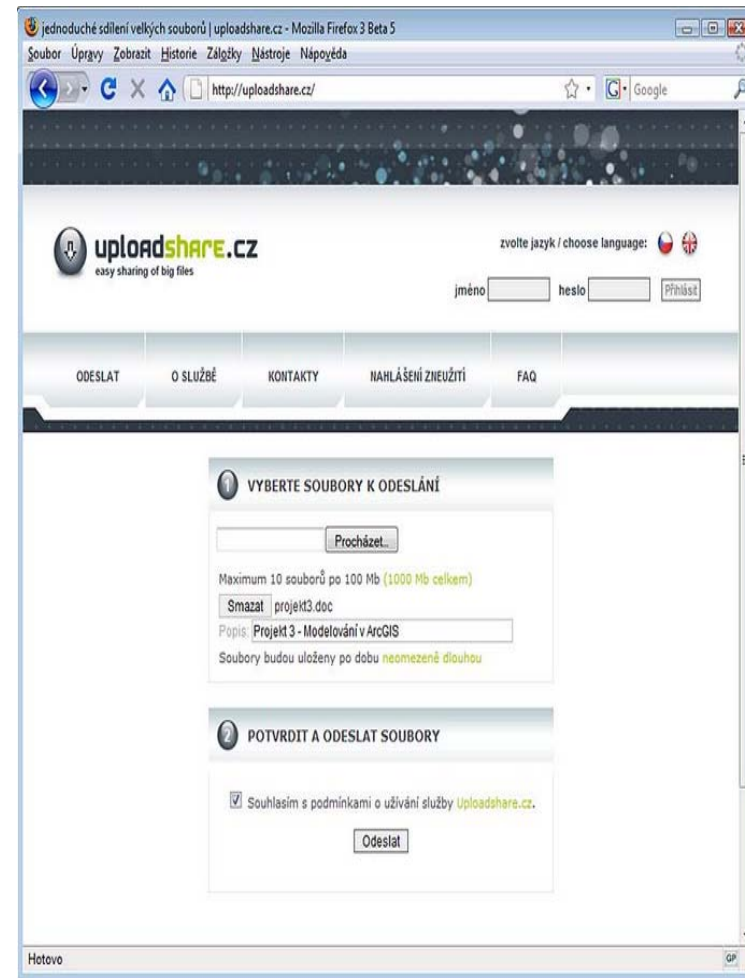
- ❑ Tonido allows you to access your files stored on your computer by a web browser.
- ❑ It provides an environment for file access, jukebox for playing music, search for files and personal blog.
- ❑ Since Tonido only facilitates access to files on your computer without being stored on another server operator, the computer must be turned on. [1]





# Using public storage

- Data can be uploaded to your FTP storage, you can use P2P solutions - IM, DC, BitTorrent, and other types of peer-to-peer connections. The third and most convenient way is to use anonymous data sharing website repositories. [2]



# P2P – torrent

- ❑ BitTorrent is a tool for peer-to-peer (P2P) file distribution, making data transfers decomposed among all clients who download data. Very popular when downloading large volumes of data.
- ❑ Before sharing a file (or group of files) a small file called a "torrent" is first created.
- ❑ This file contains metadata about the shared data to be shared on the tracker, a computer (server-daemon), which coordinates the file distribution.
- ❑ Peer who want to download any data must first obtain the appropriate torrent file to connect to the specified tracker, which tells where you can download pieces of the file (s). [3]



# The defence

Learn what is your audience:

- ☐ Experts × amateurs, executives × specialists, beginners × experienced in the field,
- ☐ environment from which they come
- ☐ what they know about a topic
- ☐ what they expect

# Place, time, length

- ☐ be on time
- ☐ upload your presentation on PC, and become familiar with the location and ICT
- ☐ = length of presentation time required for the preparation of professional presentations (including equipment, printed materials, etc.)
- ☐ compliance with the specified limit! (try out)

# Frequent mistakes

- ☐ disinterest of the speaker for the listener - little or no contact with auditorium
- ☐ reading speech notes without additional comments
- ☐ playing with the stylus, marker or control
- ☐ sloppy appearance or touching your clothing during the presentation [6]

# Hints

- ☐ Learn the names of students
- ☐ do not play with objects that you hold in your hands
- ☐ conclusion of your presentation is the last chance for you and your audience
- ☐ If you are using notes, write them on small, stiffer cards

# Coping with problems

- ☐ Prepare in advance a doomsday scenario "What do I do if ..."
- ☐ e.g., "... when I get the awkward question?" (not a monologue speaker, positive interactions with the audience, questions from the audience whether a communication, expression of interest) - think about possible questions
- ☐ respond assertively
- ☐ do not argue
- ☐ repeat the question to make sure you understand it correctly [6]

# Assignments

1. Team leader and members apply the methods of sharing data - comment during the defense.
2. Presentation (PPT) of the defense will be inserted after incorporation of comments into e-learning system.
3. Results of the case study will be used after consideration of the investigator for the test.

# Resources:

1. *Nástroje pro vzdálený přístup*. <http://www.dobreprogramy.cz> [online]. 2013 [cit. 2013-12-16]. Dostupné z: <http://www.dobreprogramy.cz/pocitacove-site-internet/nastroje-pro-vzdaleny-pristup>
2. *Přehled českých webových služeb pro snadné sdílení dat*. [Http://www.zive.cz](http://www.zive.cz) [online]. 2013 [cit. 2013-12-16]. Dostupné z: <http://www.zive.cz/clanky/prehled-ceskych-webovych-sluzeb-pro-snadne-sdileni-dat/sc-3-a-141698/default.aspx>
3. BitTorrent. [Http://cs.wikipedia.org](http://cs.wikipedia.org) [online]. 2013 [cit. 2013-12-16]. Dostupné z: <http://cs.wikipedia.org/wiki/BitTorrent>
4. AV MEDIA, a. s. *Úspěšná prezentace* [online]. © 2007, [cit. 2009-11-09]. URL: <http://www.uspesnaprezentace.cz>.
5. NÖLKE, Claudia. *Umění prezentace: jak přesvědčivě, srozumitelně a působivě prezentovat*. 1. vyd. Praha: Grada, 2004. 111 s. 80-247-9057-2.
6. ŠPAČKOVÁ, Alena. *Moderní rétorika: Jak mluvit k druhým lidem, aby nám naslouchali a rozuměli*. Praha: Grada Publishing a.s., 2003. 120 s. 80-247-0633-4.