Announcements

- Final Exam:
  - 2004Apr27
    - 9-11am
      - SE3093
- UofT ranks 23/500
  - World Ranking
    - Shanghai Jiao Tong University Institute of Higher Education
- Commerce Events
  - www.ucsonline.ca

MGT 415H5 S
Electronic Commerce

Lu Lahodynskyj

Week#9 – Trust

Agenda

- Notes
- Group Assignments
  - Those who are electing to redo their projects see me after class
- Individual Assignment
- This Week
  - Trust
    - Security&Privacy
    - Law
- Next Week

Individual Assignment – Due NEXT Week

- Check the rubric, example and template BEFORE you start
  - Ensure you have
    - Covered all of the sections
    - Current information
- Anyone ready to submit?
  - TurnItIn.com
  - Through the Class page
    - test first (password with ID)
      - without the Bibliography
- Before the Final submit
  - Double-check rubric & template & example
    - Group Assignment, only ONE group followed the template
  - Password is.....
    - Do not write it down!

Trust

Security & Privacy

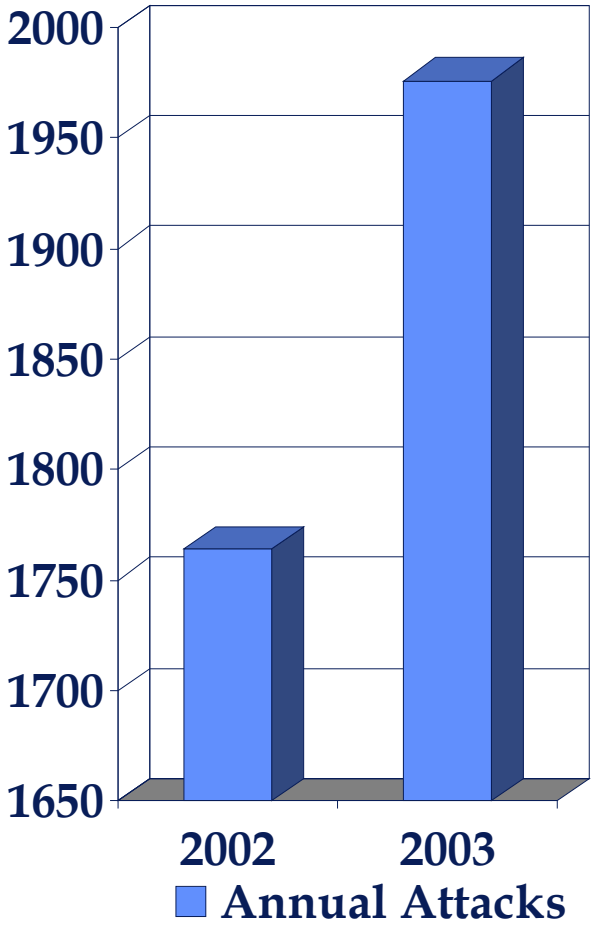
ISO17799

- Business Continuity
- System Access Control
- System Development & Maintenance
- Physical & Environmental Security
- Compliance
- Personnel Security
- Security Organization
- Computer & Network Management
- Asset Classification & Control
- Security Policy

Our Focus

- People
- Access
- Securing Information

Why is it Important?



- Horror Stories
  - Bad P.R.
    - Look communications in the news with their CC scandals.
    - Win 2K taking down Humber
    - Australian ISP
- www.cert.org
- www.owasp.org
- Algonquin college

Two Parts

- Things that happen
- What to do about them

People

- You
  - Passwords
    - Post-It Notes, IM
  - "Innocent" mistakes
    - e-mail attachments
    - File and Printer Sharing
    - Encoding vs. Encrypting
  - Bad Sites
    - Cookies
    - Plug Ins
    - Spyware
      - Gator
      - Kazaa
  - Wireless "leaks"
    - Point to Point to Point

People – Playing People

- "Social Engineering"
  - Con Artists
- Techniques
  - Baiting
  - Pulling Rank
  - Exhausting
  - Surf Boarding
  - Surveys
  - Tailgating

People - Employees

- Sign a policy?
  - Monitored
    - Surf/Email
- What do you throw into the garbage?
  - Dumpster divers
- Downloading onto unsecured laptop?
- Just another Hacker/Cracker?
  - Ersatz Employee

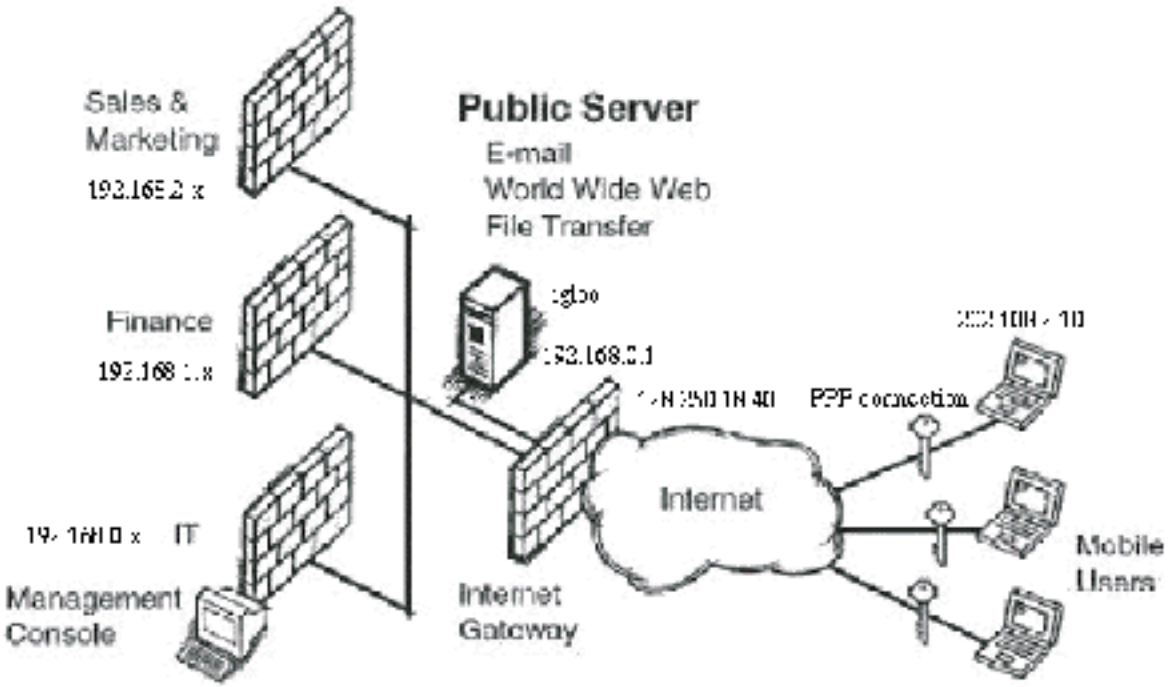
People - Hackers/Crackers

- What they typically do
  - Brute Take Down
  - Sneaky infiltration
- How
  - Ports
  - Software vulnerabilities
- Easier today
  - Sites you can go to
    - Advice
    - Software
    - Caveat
      - They may hack you

Security – Hackers/Crackers

- Friendly Hackers
  - Alberta university
    - Course in hacking
  - Corporate Hackers
    - Testing your system

Security – Secure Information?



- Application
- Network
  - Internet
    - Peer-to-Peer
  - VPN/VAN
- Servers

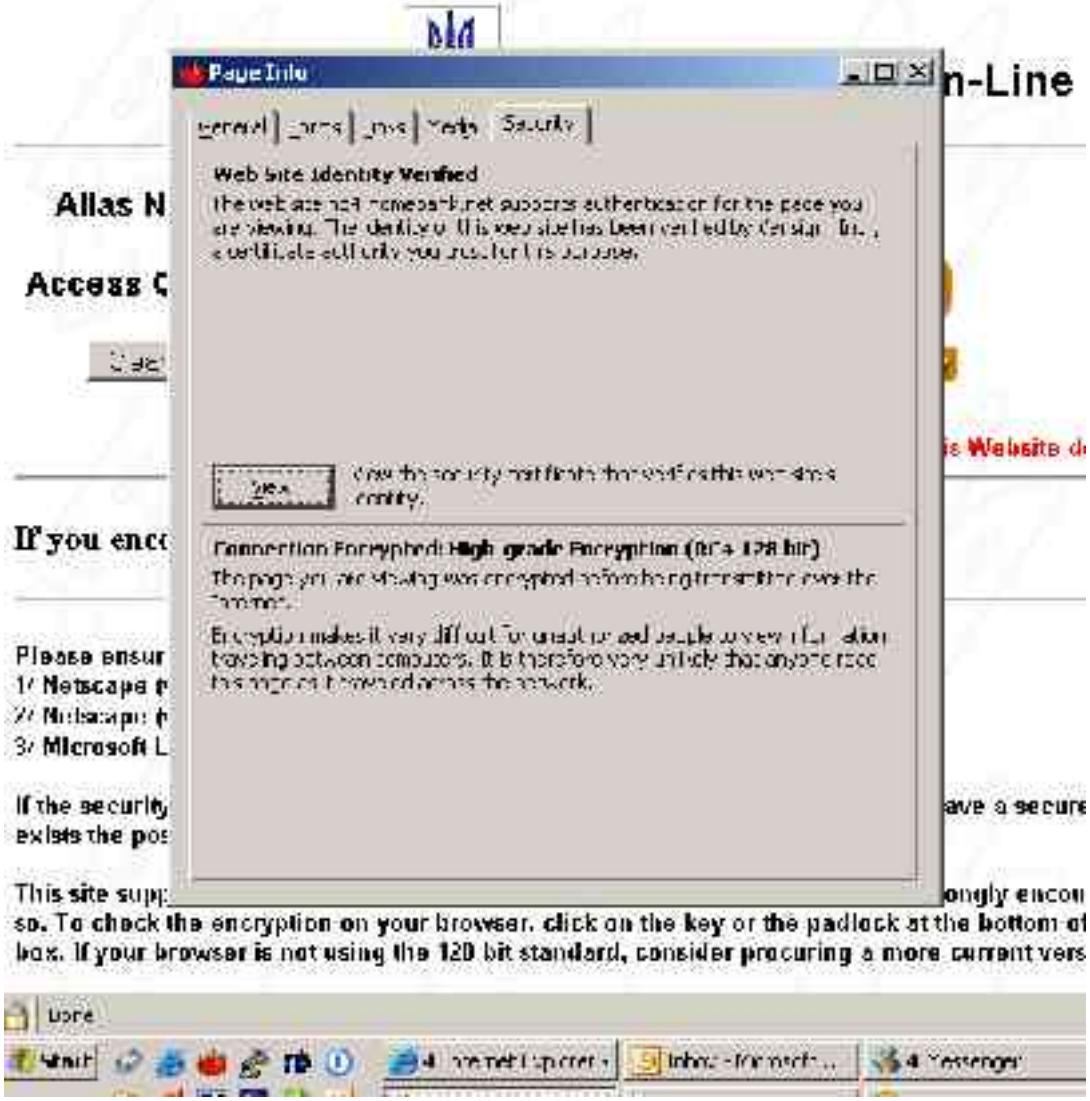
Security – So what is secure?

- Email?
  - Pretending to be someone else.
  - Open relays.

Security – So what is secure?

- Messengers?
  - Not MSN, ICQ or AOL
  - Yahoo?
  - Corporate editions of messengers?

Security – So what is secure?

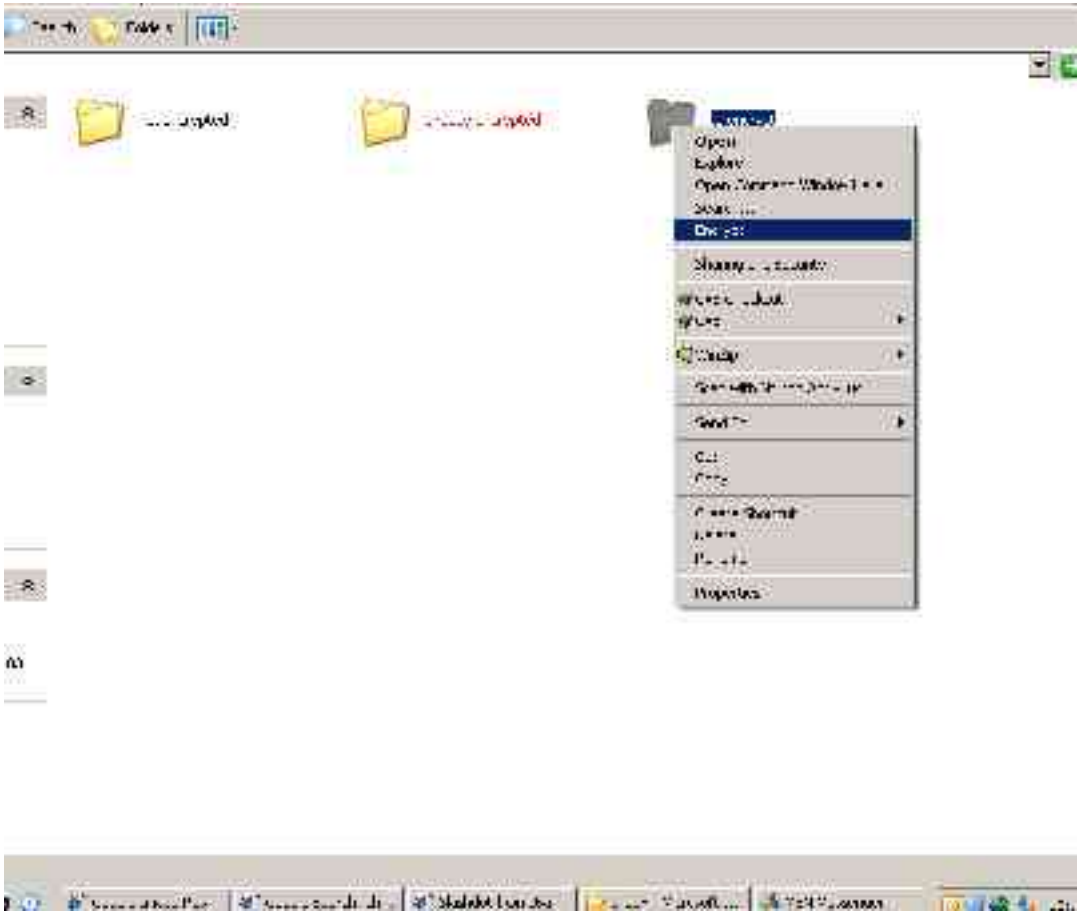


- Web Sites?
  - Checking the certificate
- Encryption?
  - Public/Private Key
  - 128 bit security
  - https

Security – So what is secure?

- Sign-on
  - "Who are you?"
    - Passwords
      - 1 in 8 = password
    - Biometrics
      - James Bond
      - Reality
    - Keys
      - Cookies
      - Digital
        - Algorithm

Security – So what is secure?



- Data on the hard drive?
- Encryption techniques

Part Two

- What to do about them

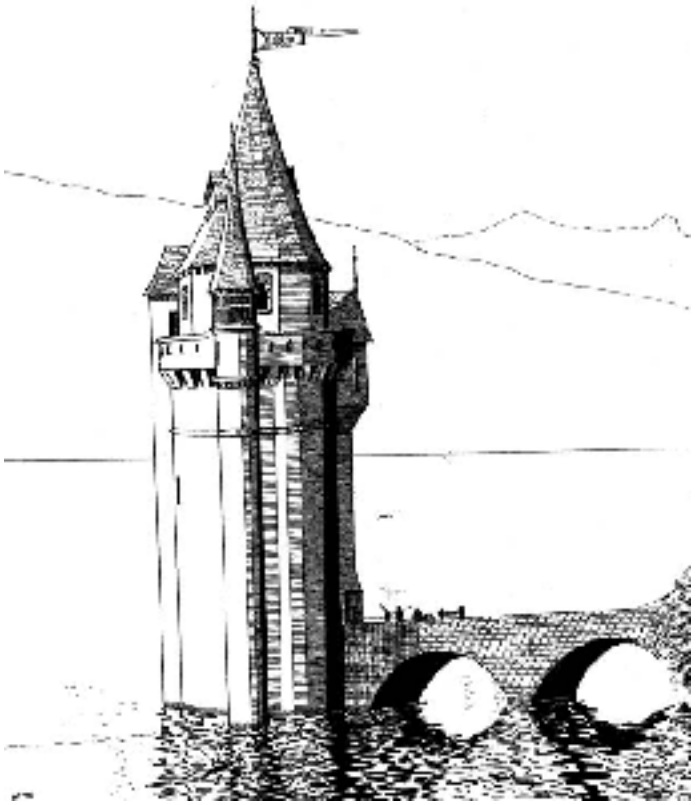
Before Anything !

- Find out if you have anything worth protecting!!!
- If you have
  - Research
  - Acounts
  - Credit Cards
- Bureaucracy vs Flexibility & Speed

People - Everybody

- Good passwords
  - letters, #s, case
  - NEVER written down
  - Change
- Shredder
  - If it has a name, phone# , account#, customer details, addresses, etc..
- Encryption
- Anti-virus
- Safe surfing
  - Ad-aware
  - Spybot

People - Hackers/Crackers



- Talk to?
  - "If you tell someone a secret, then it is no longer a secret"
- Firewall
  - Fortress
  - Tripwire
- Get the good-guys to find out how secure

Security – Secure Information?

- Application
  - Tools?
  - Techniques?
- Vendor Concerns
  - Sneaky Vendors

Security – Secure Information?

- Network
  - Authentication
    - Algorithm
      - Code number constantly changing
      - Sound card
- Novell
  - Network Drives vs. Physical Theft

Security – Devices

- Lock them up!
  - Keep them safe
- Types
  - Laptops
  - PDAs
  - Memory sticks
  - Floppies
  - CDs
  - Servers
    - OpenBSD

BIG BROTHER

IS WATCHING YOU

What Not To Do

- Overkill
- Too Frequently Rolling Passwords
- Spying on your employees

Security – So what is secure?

- Email?
  - It's all on a backup tape somewhere
  - Treat as not secure
  - Encrypted E-mail?

Security – So what is secure?

- Messengers?
  - Not MSN, ICQ or AOL
  - Yahoo?
  - Corporate editions of messengers?

Security – So what is secure?

- Web Sites?
  - How to?
  - Safe
    - VeriSign
    - Thawte
  - Is it real?
    - Fake e-mails
      - Click on the link
      - Takes you to a site that looks like your bank

Security – So what is secure?

- Sign-on
  - "Who are you?"
    - Passwords
    - Biometrics
      - James Bond
    - Keys
      - Cookies
      - Digital
        - Algorithm
    - Identity Management
      - SAML from OASIS
      - WS-Security from Microsoft & IBM

Security – So what is secure?

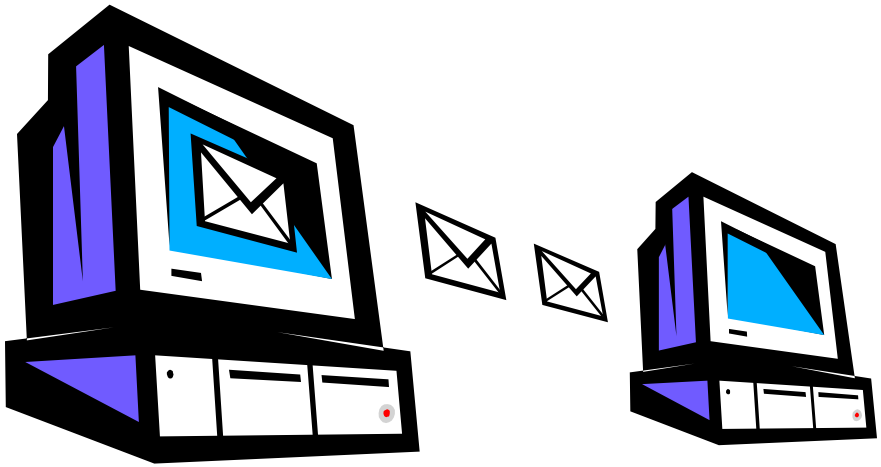
- Data on the hard drive?
- Encryption techniques

Summary

- Constant Vigilance
- Ask Questions
- Get a second opinion
- Be Careful
- Nothing is completely secure
- Computer security is just an extension of what's been going on since the dawn of humanity
- Get a technician to sign off

Legal Issues

E-mail

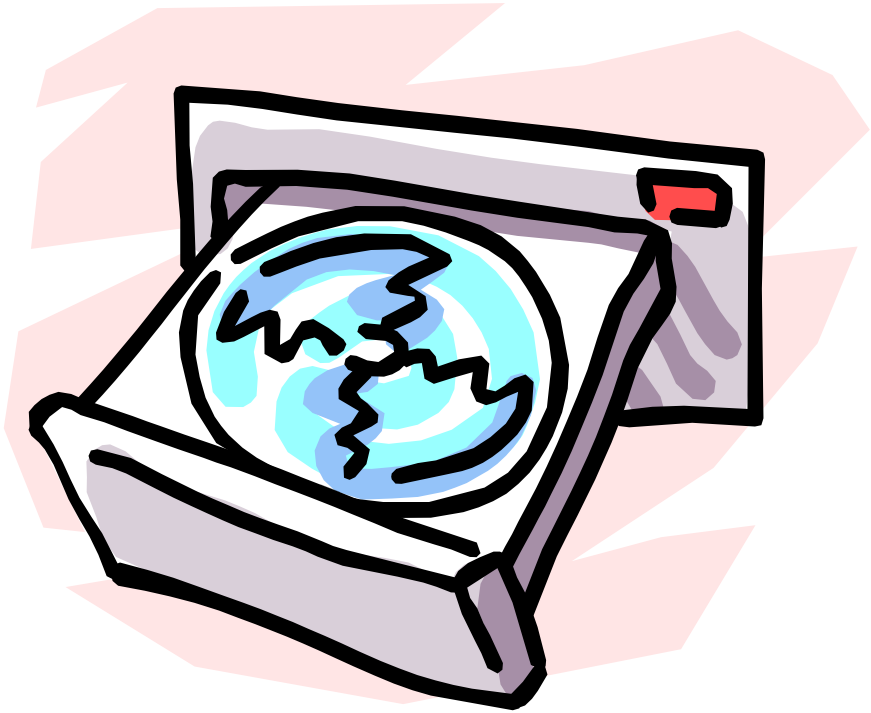


- Investigators
  - Will find it
- Responsibility
  - Only write what you would be happy to see in court
  - Stick to the facts
  - Say the minimum
  - Do NOT speculate

Licence?

- Asset Management
  - Do you know what you have?
  - 33% of Software from illegal copies
    - CAAST
      - GASP
      - WebCensus
    - BSA
    - Microsoft

Downloading Files

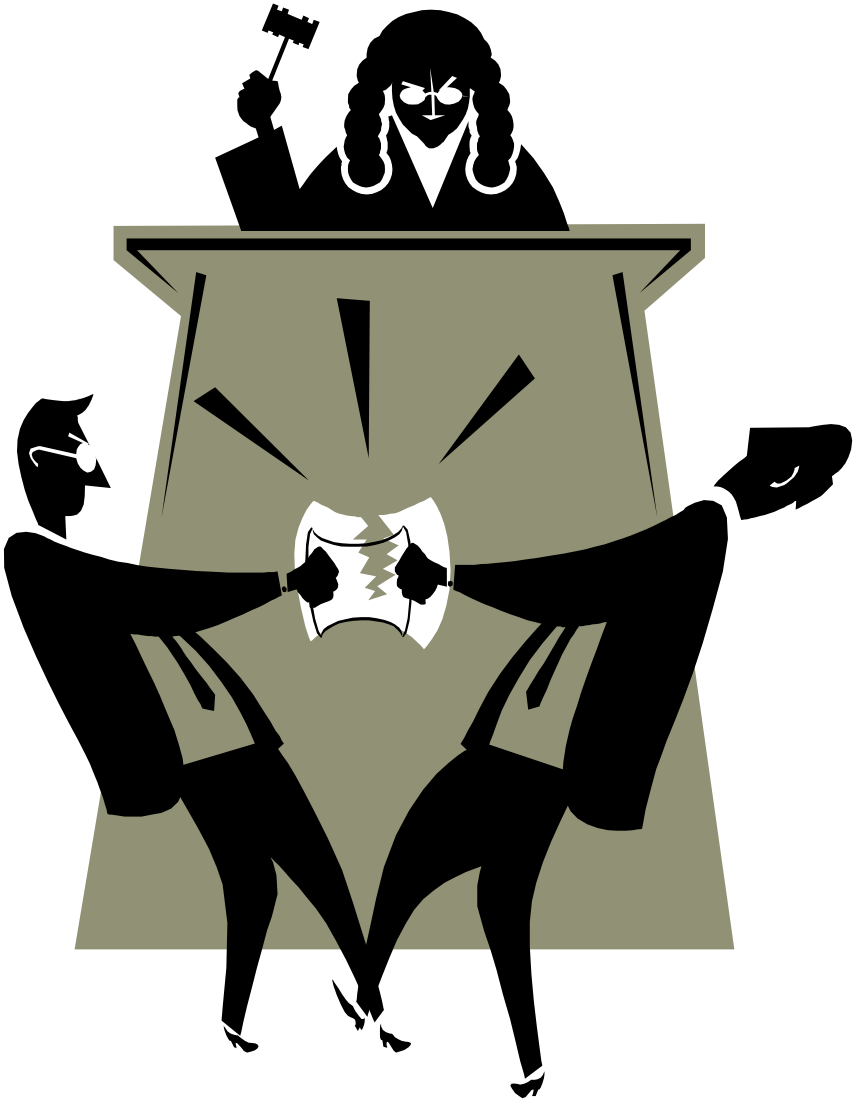


- Copying
  - In Canada
    - Only for personal
    - Check the download site
- Impact
  - Levy on blank CD's
    - Used for Backup
- Reason for this
  - Copyright

Copyright

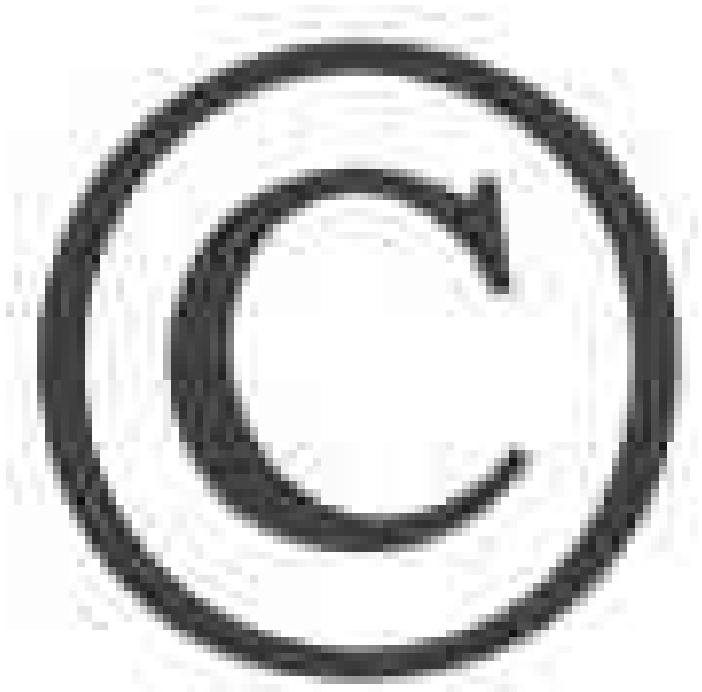
- Automatic
  - 50yrs/75yrs
  - Rights
  - If you sign.....
- Also
  - Moral Rights
  - Public Domain
- Alternatives
  - Patent
    - Pay
    - Lasts 20yrs
  - Trademark
    - Pay & Control

Protected?



- Gotta sue

Liability



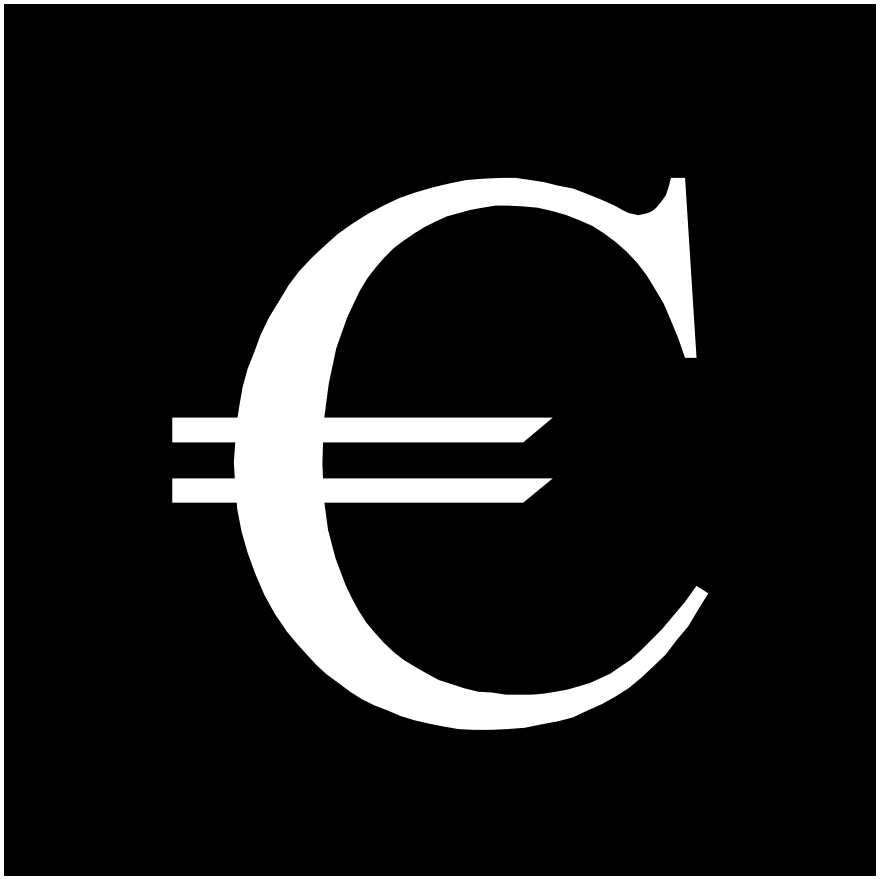
- Copyright Infringement
  - Have to trace you
- Terms&Conditions
  - Class Poll
    - Who reads them
- Kids
- Porn
  - If it is on your PC.....

Legislation – Considerations

Legislation - Canada

- 2004Jan01
- Compliance
  - PIPEDA
    - Ask for OK to save information
    - Show consent given
    - Ensure only required info tracked

Legislation – EU



- 2003Oct31
- No e-mail marketing without consent
- Impact beyond business
  - Eg:
    - British Computer Society
      - Notices about events

Legislation - California

- 2004Feb
- FCC vs fax.com
  - Won $11,000 per junk fax sent in California
    - 489 counts
  - US$5.4million
- Will Spam or Newsletters be treated the same?

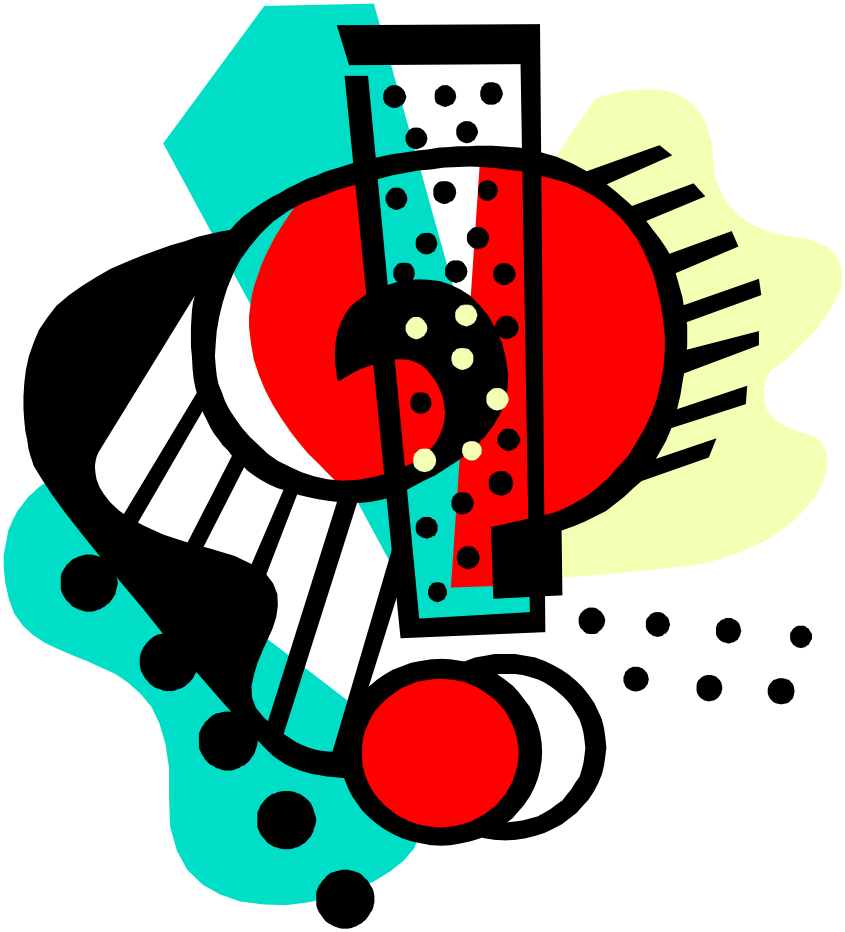
Legislation - USA

- 2004Feb
- "Do Not Call" legislation

Legislation - UK

- 2003Oct10
- New Bill
  - Deposit electronic copies
    - Same as books
  - May include
    - web-pages
    - blogs

What to Do?



- No answers
- Unless
  - All of the above
  - Override Clause
    - "Remember I am not a Lawyer. These are my opinions, and not meant to be construed as legal advice."

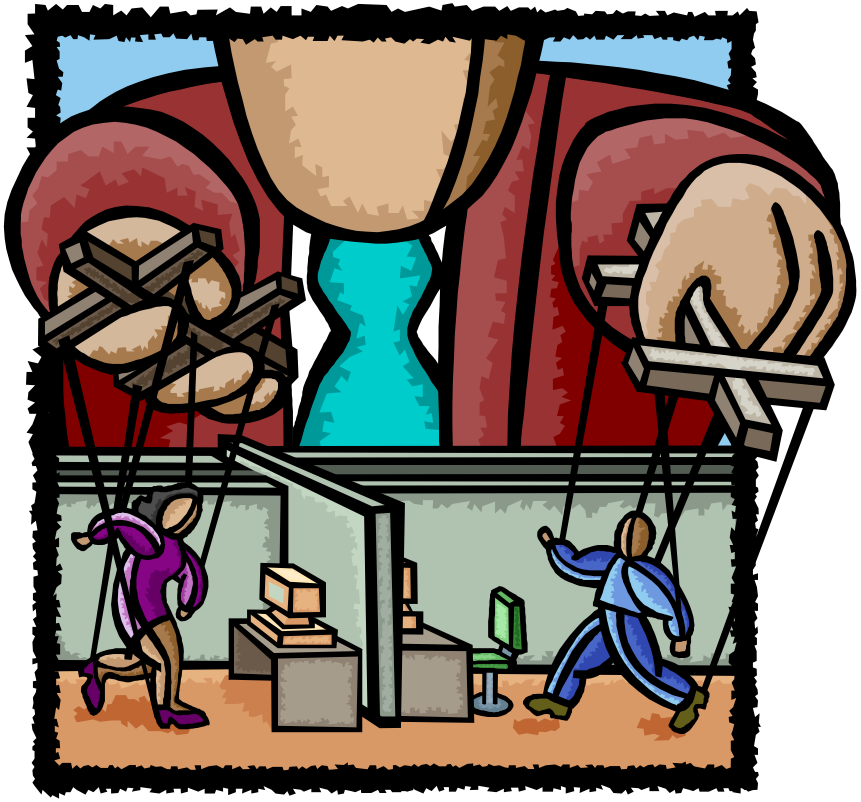
Case

- E-Commerce and the Construction Industry: User Viewpoints, New Concerns, Legal Updates on Project Web Sites, Online Bidding and Web-Based Purchasing
- December 22, 2003
- By Paul W. Berning and Peter Flanagan
  - Thelen Reid & Priest LLP

Case

- On-line
  - Project Management
  - Project Bidding
  - Buy/Sell

Case – Project Management



- Advantages
  - Immediate access
    - Up to date docs
    - Better communication
    - Accountability
    - Reduced site visits
- But
  - Connectivity
  - Compatibility
  - Capacity
  - Security Concerns
  - Legal Concerns

Case – Bids

- Advantages
  - Clients
    - Accuracy
    - Consistency
    - Time-saving
  - Bidders
    - Accuracy
    - Travel time
- But
  - Receipt of bid
  - Face-to-face
  - Reverse

Case – Buy/Sell

- Advantages
  - Agencies & Contractors buy at "up to 70%" below list
  - Accuracy
    - >400,000 items
- But
  - Pre-approval
  - Abuse?

Final Thought – Idea from Legal?

- Dell UK site has these questions as you complete a purchase
  - Will you be using this equipment or someone else?
  - What is the intended use?
    - Home
    - Commercial
    - Government Civilian
    - Government Military
  - Will the product be exported?
  - **Will the product(s) be used in connection with weapons of mass destruction?**

Group Presentations

Group Presentation Rewrite?

- Groups
  - UML
  - HTML
  - XML
  - MySQL
  - Java
  - J2EE
  - Spam
- Who?
  - Focals see me after class
- Expectation?
  - PPT
    - Ranking
      - from 1, 2 and 3
      - to 3 and 4
  - Doc
    - Probably similar
- Due
  - This Friday
  - March5th, 4pm
  - TurnItIn.com
- Results
  - To Focal on Monday

Next Week

- Class = Project Management
- Individual Assignments Due