Ethics and Technology

Daniel J. Crothers, Justice
North Dakota Supreme Court

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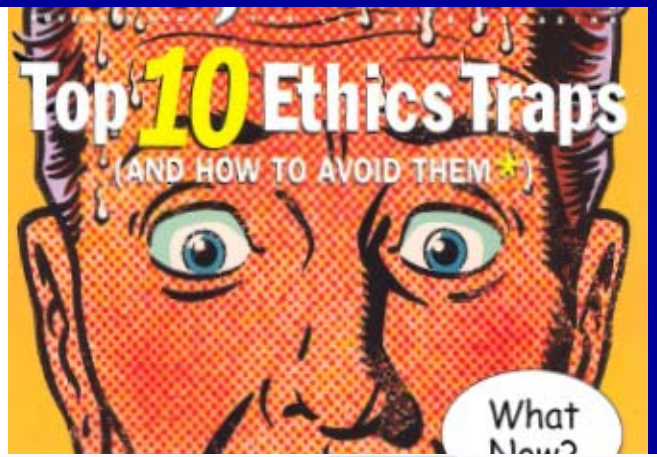
Before This Session…

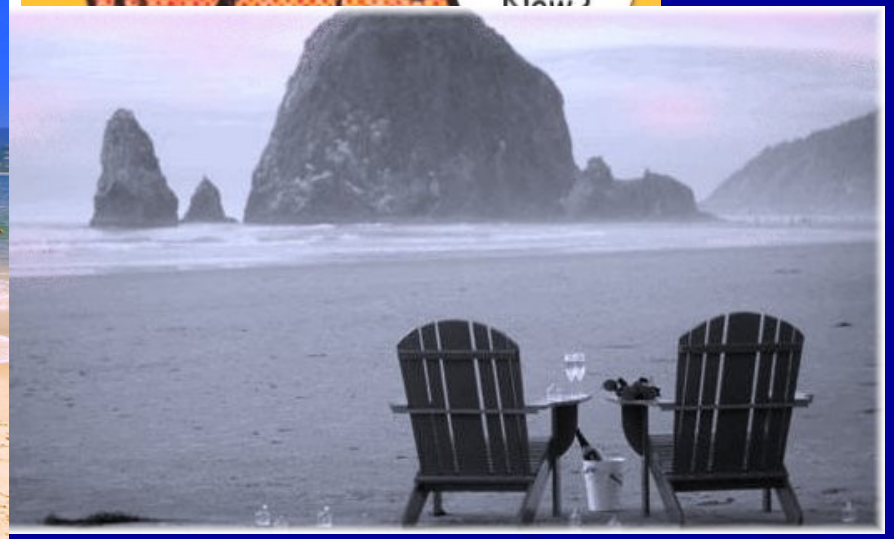
After This Session…

Before This Session…

After This Session…

- W





Confidentiality

Confidentiality

- "A judge shall not disclose or use, for any purpose unrelated to judicial duties, nonpublic information acquired in a judicial capacity"

ABA Code Jud. Conduct 3(B)(12)

Confidentiality

- "A judge shall not, while a proceeding is pending or impending in any court, make any public comment that might reasonably be expected to affect its outcome or impair its fairness or make any nonpublic comment that might substantially interfere with a fair trial or hearing"

ABA Code Jud. Conduct 3(B)(9)

Confidentiality

- "The judge shall require similar abstention on the part of court personnel subject to the judge's direction and control"

ABA Code Jud. Conduct 3(B)(9)

Confidentiality

- A lawyer shall not reveal information relating to the representation of a client unless the client gives informed consent
- The duty of confidentiality continues after termination of the lawyer-client relationship

ABA Rule Prof. Conduct 1.6 (2000)

Confidentiality

- A lawyer must act competently to safeguard client information against inadvertent or unauthorized disclosure
- When transmitting client information the lawyer must take reasonable precautions to prevent the information from coming into the hands of unintended recipients

Comment, ABA Rule Prof. Conduct 1.6 (2000)

Confidentiality

- This duty of confidentiality does not require use of special security measures if the method of communication affords a reasonable expectation of privacy
- Special circumstances may warrant special precautions depending on:
  - the sensitivity of the information and
  - the extent to which the privacy of the communication is protected by law or by a confidentiality agreement

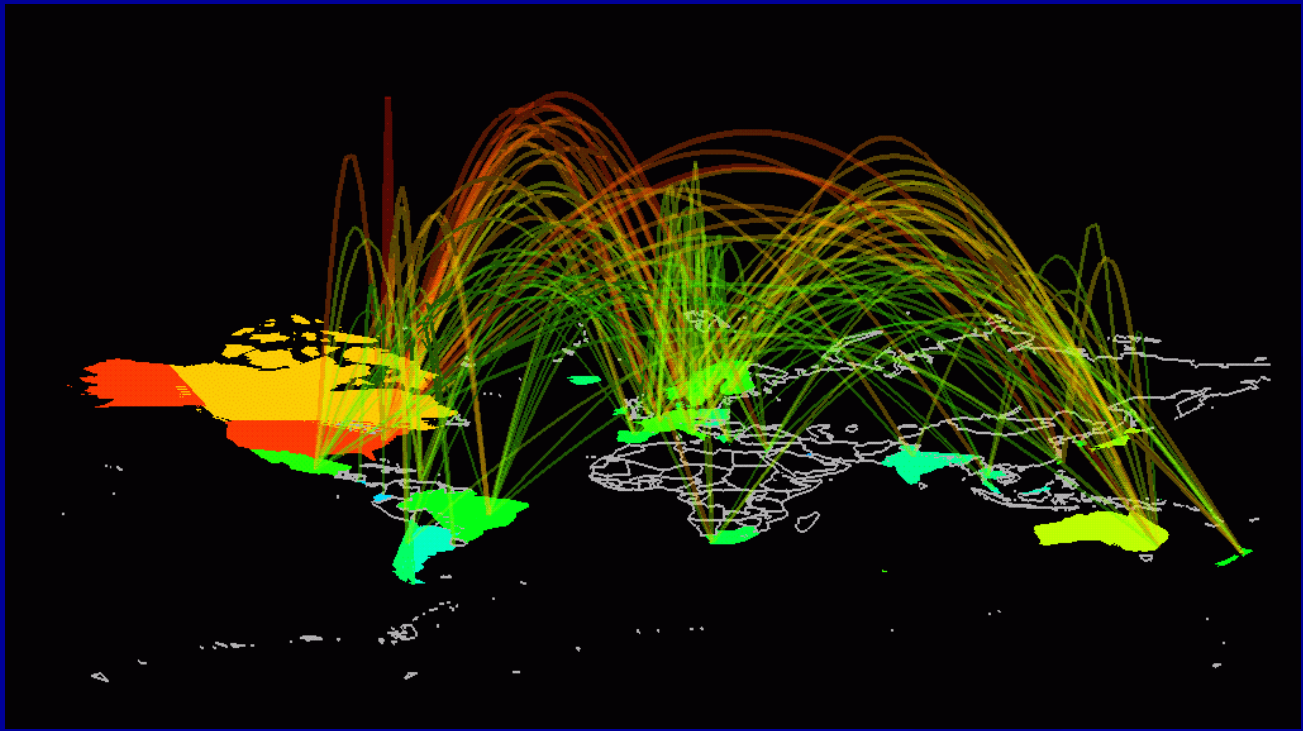
Comment, ABA Rule Prof. Conduct 1.6 (2000)

Confidentiality

- A client may require the lawyer to implement special security measures not required by this Rule or may give informed consent to the use of a means of communication that would otherwise be prohibited by this Rule

Comment, ABA Rule Prof. Conduct 1.6 (2000)

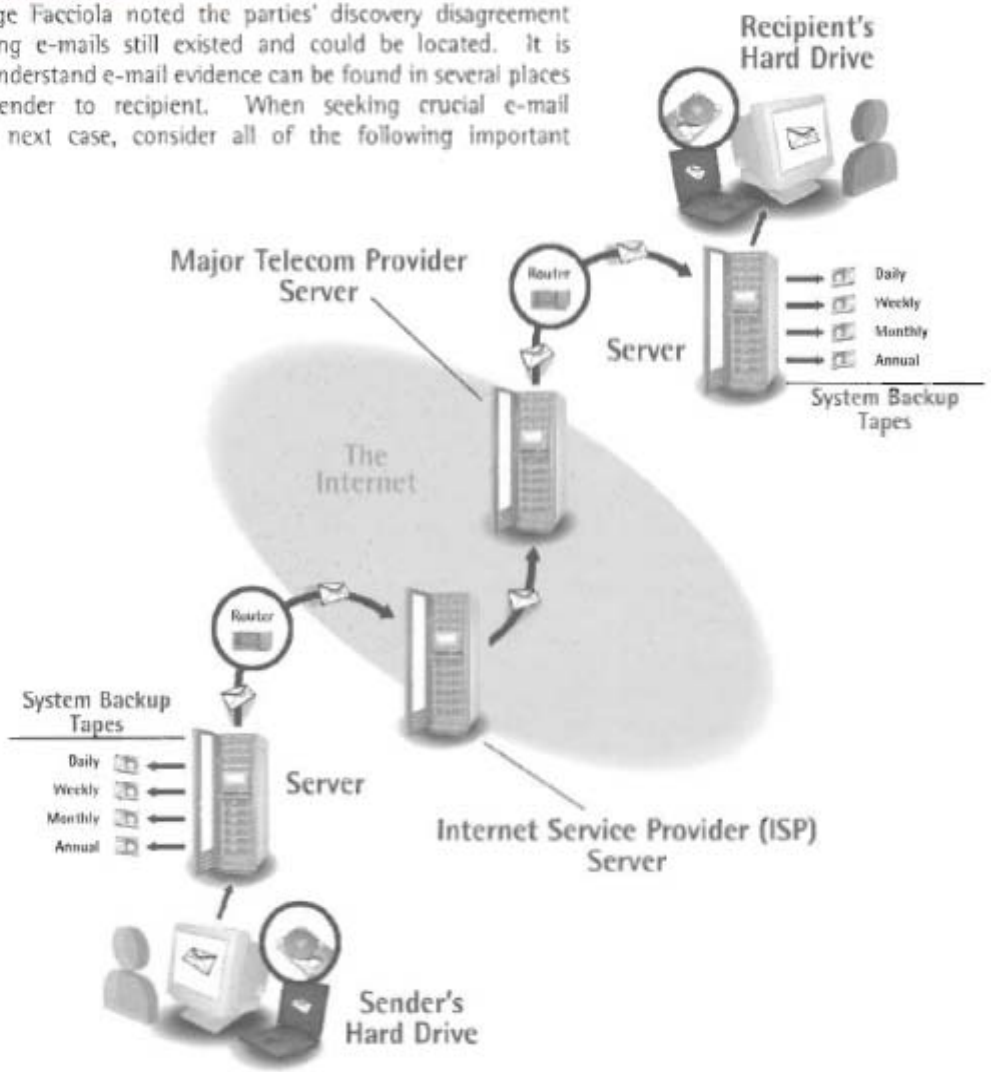
Can You Use Email?



Email & Confidentiality

Where Can You Find E-mail Evidence?

In *Peskoff v. Faber*, Judge Facciola noted the parties' discovery disagreement turned on whether missing e-mails still existed and could be located. It is important for counsel to understand e-mail evidence can be found in several places along the path from sender to recipient. When seeking crucial e-mail communications in your next case, consider all of the following important locations.



Email & Confidentiality

- Advice that spans the ages:
  - “Never write if you can speak
  - Never speak if you can nod
  - Never nod if you can wink”

    19th Century Boston political boss Martin Lomasney

Email & Confidentiality

- No known judicial advisory opinions or discipline
- Lawyer ethics opinions hold lawyer does not violate Rule 1.6 by using unencrypted email for transmittal of law related information

Email & Confidentiality

- Lawyer generally does not violate Rule 1.6 by using unencrypted email for transmittal of routine legal issues
- Lawyer should consult with client and follow client's instructions regarding transmitting highly sensitive information
  - ABA Formal Op. 99-413
  - District of Columbia Bar Op. 281 (1998)
  - Minnesota Op. 19 (1999)

Email & Confidentiality

- Email use constrained in some states:
  - Lawyer may want to caution clients about transmitting highly sensitive information via email if the email is not encrypted or otherwise secure from unwanted interception
    - Arizona Op. 97-04
  - Counsel must have written acknowledgement by client of risk of disclosure of confidential information before transmitting “sensitive material”
    - Iowa Op. 97-01

Email & Confidentiality

- Commentators question email security, warning email:
  - Is subject to interception and redirection
  - Can be saved electronically and accessed by system administrators
  - Can be easily re-transmitted by recipients
  - Can be intercepted “in route” by software similar to “spam” filters
- **Takeaway Point**: use caution deciding whether to and what to email

Email & Confidentiality

- You use hotel busines
  and Microsoft Internet
  judicial email by enteri
  password
  - Any problems?
  - See reference slides st
    "clearing passwords" a
    tracks"

Medicare data left in hotel computer

WASHINGTON – Social Security numbers and other personal information for nearly 17,000 Medicare beneficiaries could have been compromised when an insurance company employee called up the data through a hotel computer and then failed to delete the file.

An auditor for the Department of Health and Human Services' inspector general came across the information a few weeks later when using the same hotel computer in Baltimore, Medicare officials disclosed Friday.

Email & Confidentiality

- Additional email issues:
  - Individual client's email sent from employer's computer system
  - Potential client sending unsolicited email to lawyer via email address found on law firm web site or on bar association web site

Wireless Devices

Can You Use Wireless Telephones?

Using Wireless Telephones

- Digital portable and cellular telephones may be used to communicate confidential information
  - **<u>BUT</u>** only while using digital service

Using Wireless Telephones

- But they don't make analog phones anymore, do they……

SINGLE-HANDSET PHONES *Best phone-only mod*

BEST BUY	1	**Uniden** EXI 4246	2.4/900A	$25	1	-
BEST BUY	2	**AT&T** E2116	2.4/900A	30	1	-
	3	**Panasonic** KX-TG5621S	5.8D	50	1	-
BEST BUY	4	**GE** 27831GE1	2.4/900A	20	1	-
	5	**VTech** V Mix gz2335	2.4/900A	30	1	-
	6	**VTech** ia5823	5.8/900A	30	1	-
	7	**VTech** t2326	2.4/900A	20	1	-
	8	**Clarity** C410	900A	70	1	-

Can You use Wireless (Wi-Fi) Networks?

Wireless Computer Networks

- You draft confidential court documents in the quiet of your home rather than your office. Documents are emailed to and from your office using legalwork@aol.com and you have remote access to your office computer via a wireless (Wi-Fi) network
  - Any confidentiality concerns?

Wi-Fi Networks

- No known discipline or ethical opinions or judicial decisions

  BUT:

- confidentiality obligation suggest use of secure wireless settings and firewall technology is required

Wi-Fi Networks

- Wi-Fi is a broadcast radio technology that works on the same 2.4 and 5 gigahertz radio bands as cordless telephones and Bluetooth wireless devices
- Software to hack Wi-Fi networks is easily available on the internet
- “Rogue wireless access points can be hooked up by anyone, exposing entire computer network to unauthorized users

Wi-Fi Networks

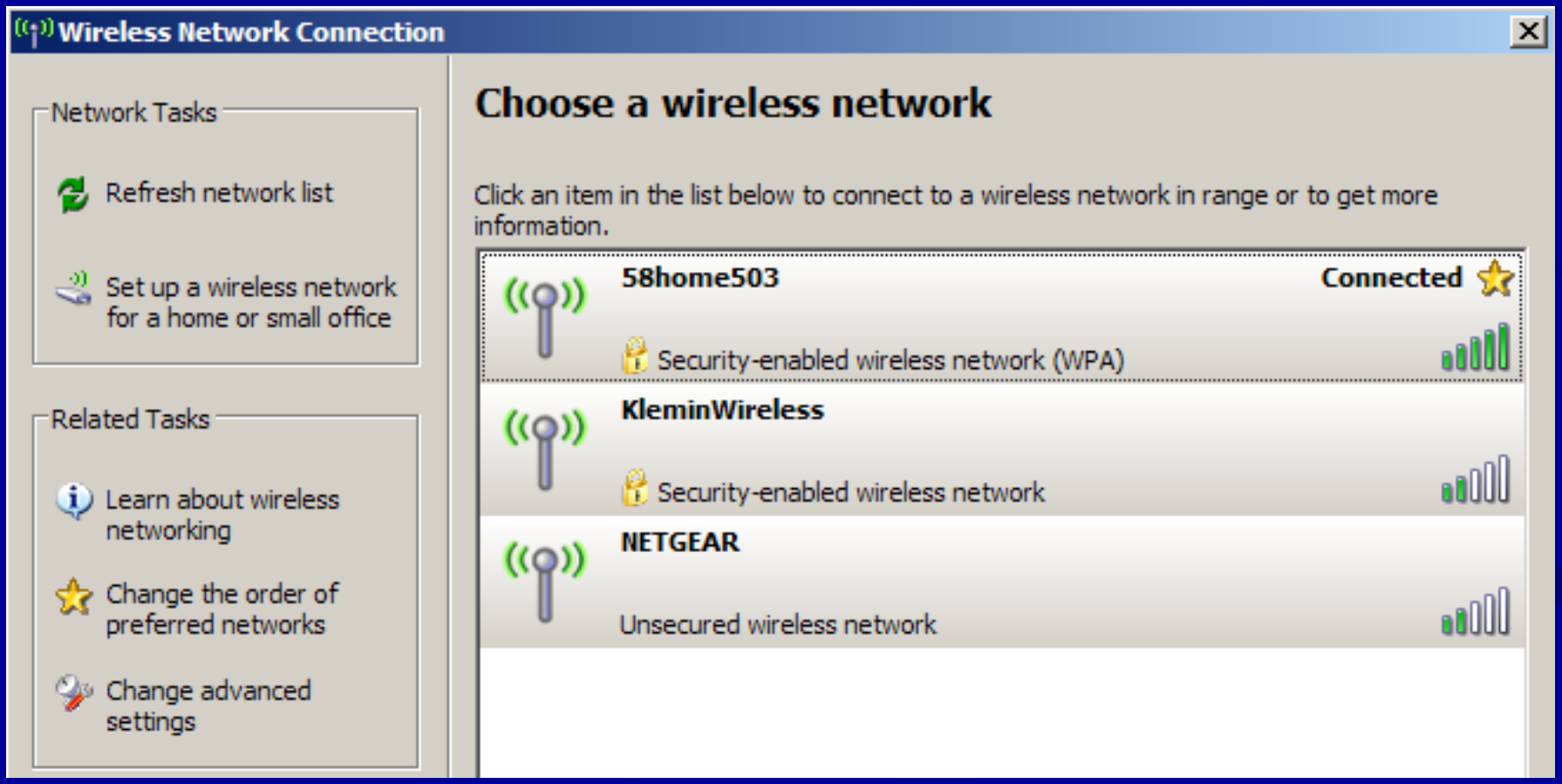
- What is “wardriving” and why should you care?
  - “To drive around with a laptop with a wireless card, and an antenna, looking for accessible wireless networks”
  - Name taken from “wardialing” in the 1983 movie *WarGames*
    - www.dictionary.com

Wi-Fi Networks

- “Wardrivers” log and collect information about the wireless access points they find while driving, without using the networks' services
- “Piggybacking” is connecting to the network and using its services without authorization

Wi-Fi Networks

- An example from my home:



Wi-Fi Networks

- Securing your Wi-Fi network:
  - Set encryption to WPA (Wi-Fi protected access) or WEP (wireless encryption protocol)
    - Default security setting usually is “none”
  - Change default passwords on access points
  - Limit time access point is “live”

Wi-Fi Networks

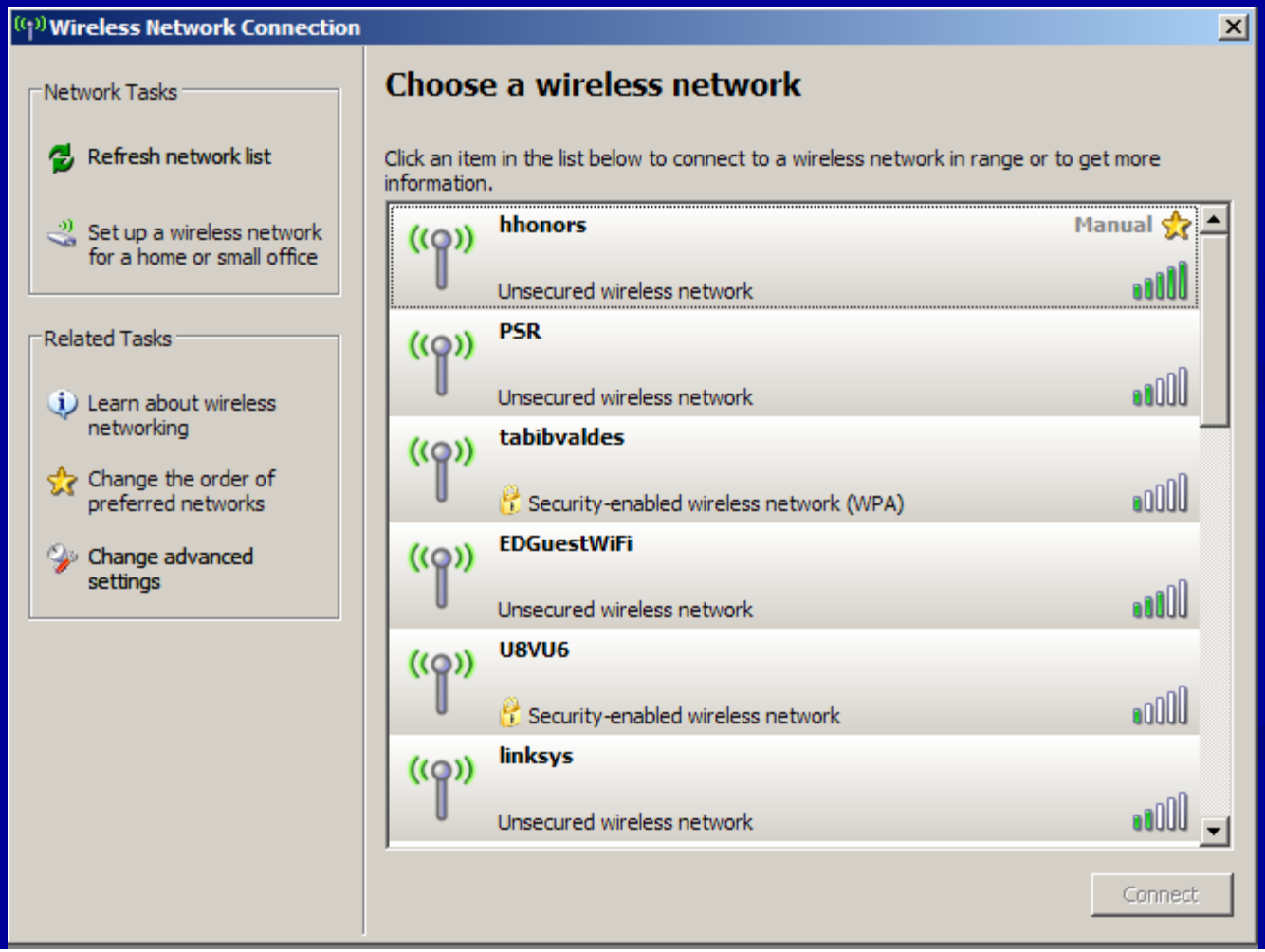
- The risk of unsecured networks and computers:
  - Others using your Wi-Fi for unlawful purposes, i.e. child pornography
    - Law enforcement tracks document viewing metadata showing MAC or IP address
  - May allow hacking into your computer
  - May allow outside access to wired network within office or home

Wi-Fi Networks

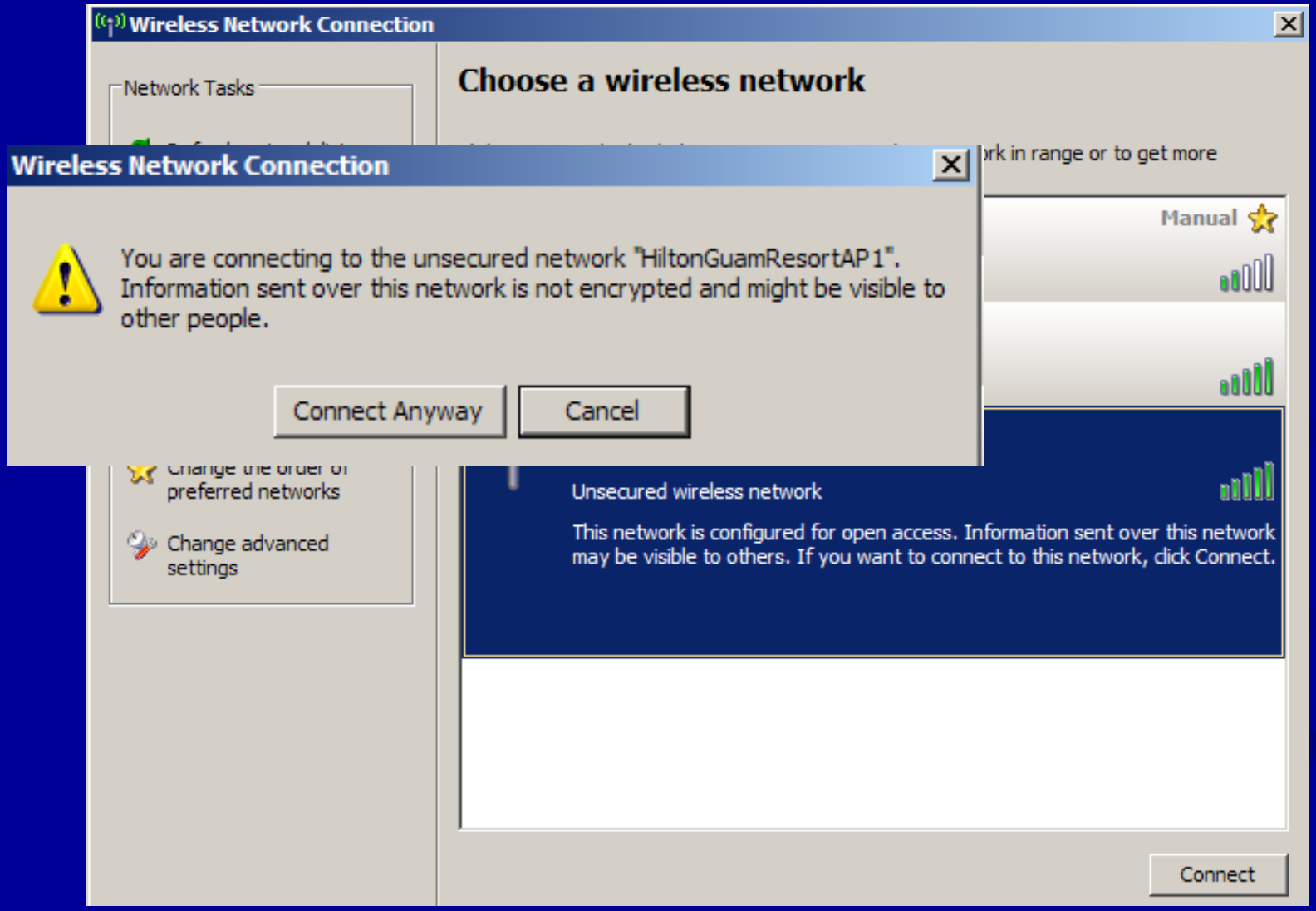
- “Shared” or “public” Wi-Fi:
  - Found in airports, hotels, fast food restaurants, coffee shops, public libraries and hundreds of other places
  - Many are free
  - All pose danger to your privacy

Wi-Fi Networks

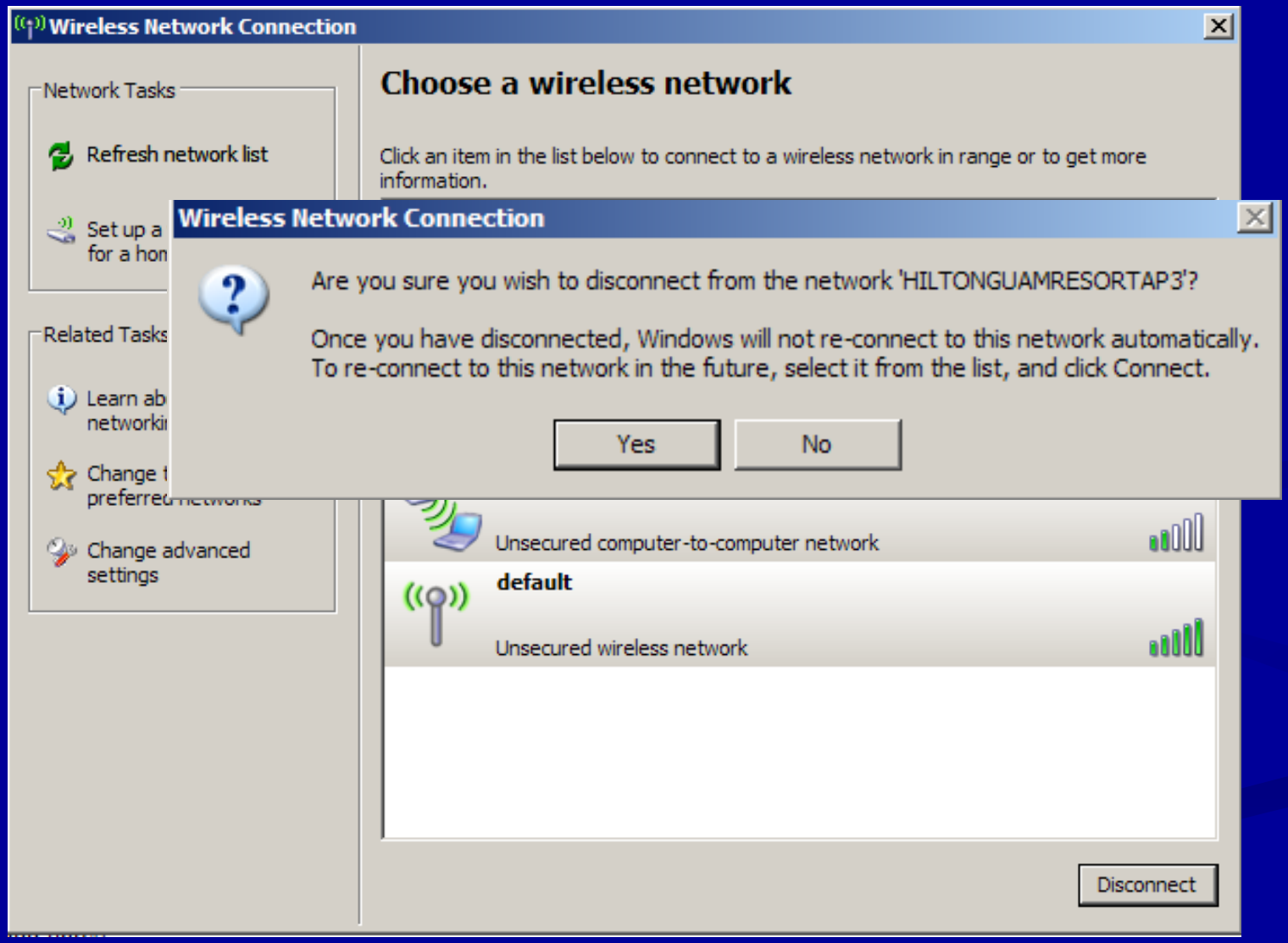
- An example from my hotel this morning:



Wi-Fi Networks



Wi-Fi Networks

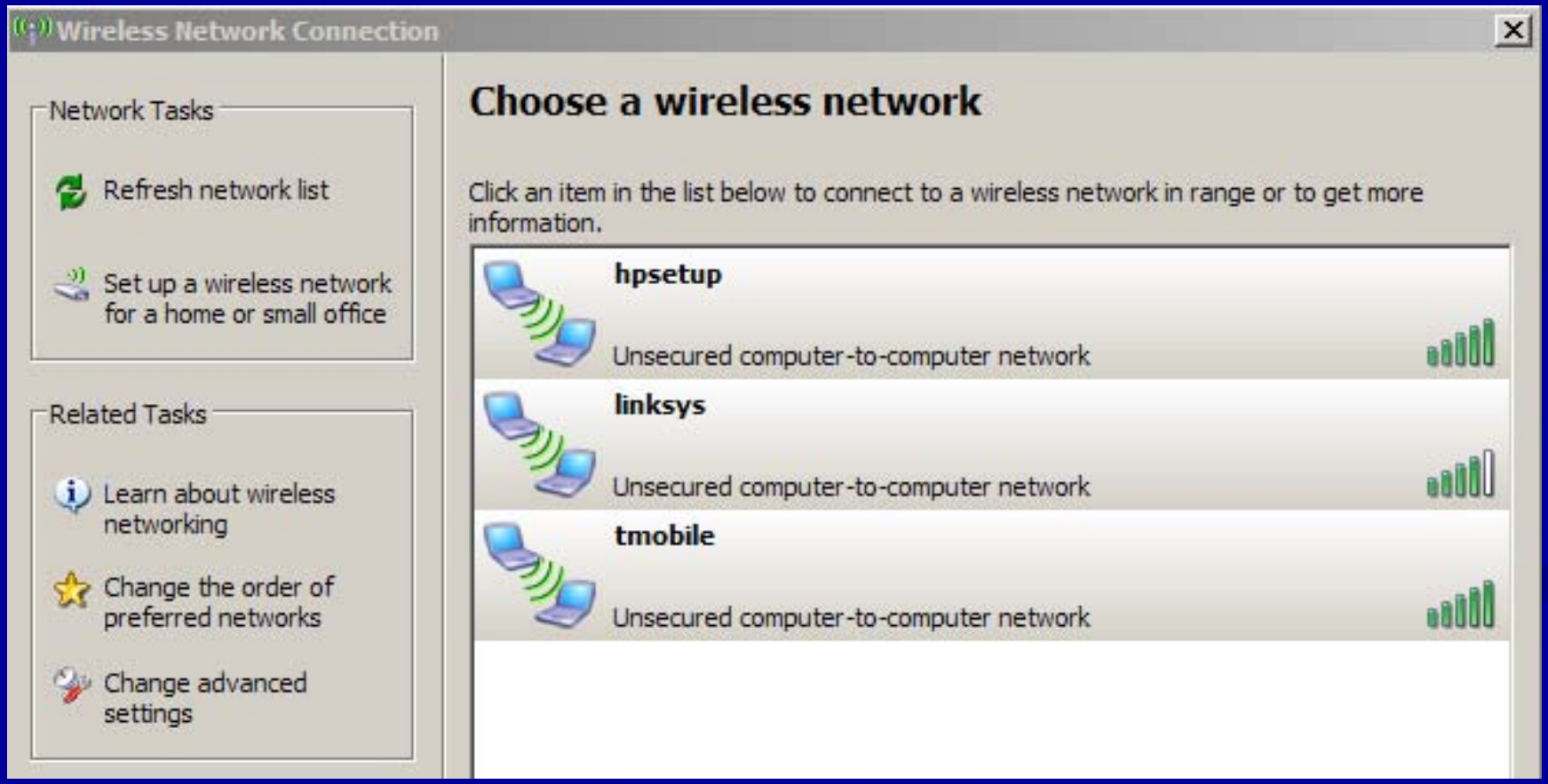


Wi-Fi Networks

- “Ad hoc” peer to peer networking
  - Computer to computer connection through wireless network cards

Wi-Fi Networks

- Computers open on a flight:



Document Metadata

What Is It
and
Why Should You Care?

What Is Metadata?

- "Metadata" is "data that provides information about other data"

Merriam-Webster's Collegiate Dictionary 779 (11th ed. 2005)

What Is Metadata?

- Computer metadata includes:
  - file date, size, author and other information easily viewable by users
  - hidden or embedded information unavailable to computer users who are not technically adept

Manual For Complex Litigation Fourth at 78

Who Cares?

- Metadata in electronic documents may inadvertently disclose confidential information:
  - “Properties” metadata
  - “Editing” metadata
  - Versions and track changes

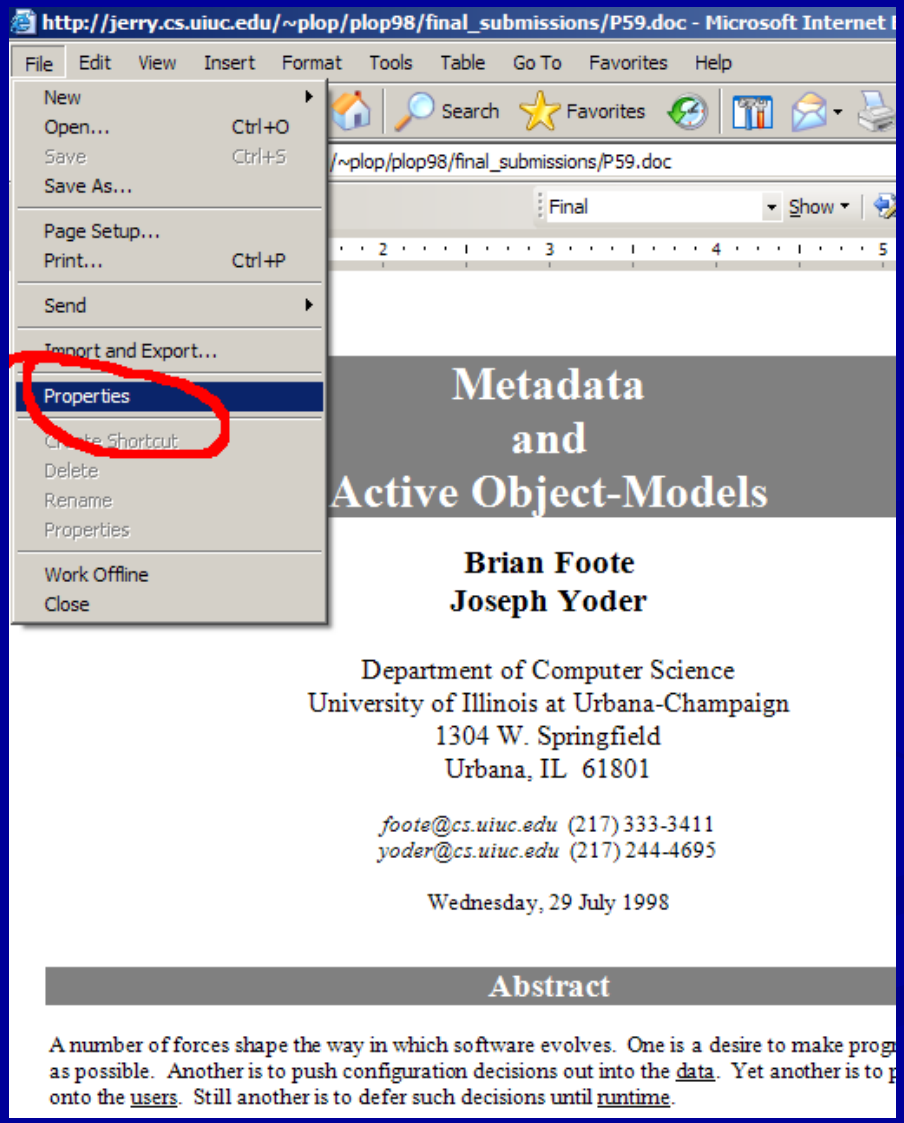
Who Cares?

- Metadata in electronic documents may not be “evidence” and therefore would be improper, extra-judicial information
  - ABA Code Jud. Conduct Canon 3(B)(7)
    - Ex parte communications prohibited
  - ABA Code Jud. Conduct Canon 3(B)(7), *Comment*
    - Independent investigation prohibited

Metadata: Microsoft Products

- The same types of metadata are created and stored in most of Microsoft's office suite products
  - Outlook--email
  - Word--word processor
  - Excel--spreadsheet
  - PowerPoint--presentations
  - Access--database

“Properties” Metadata



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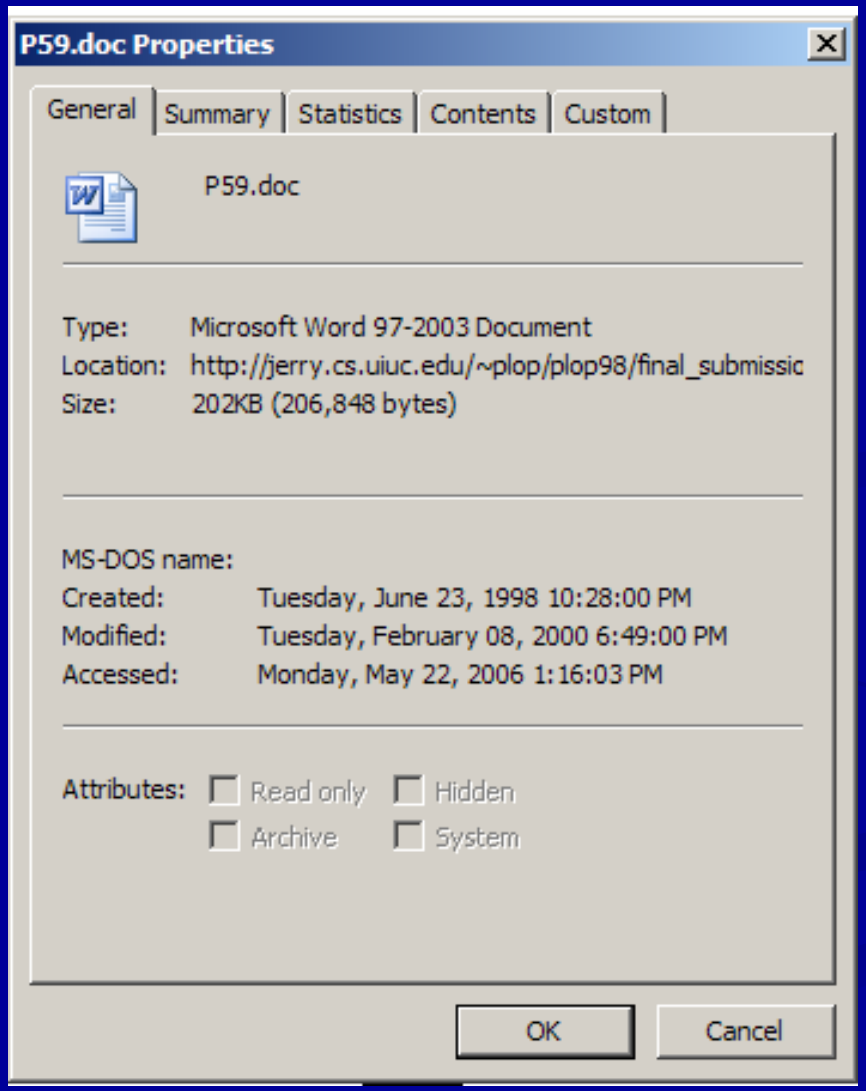

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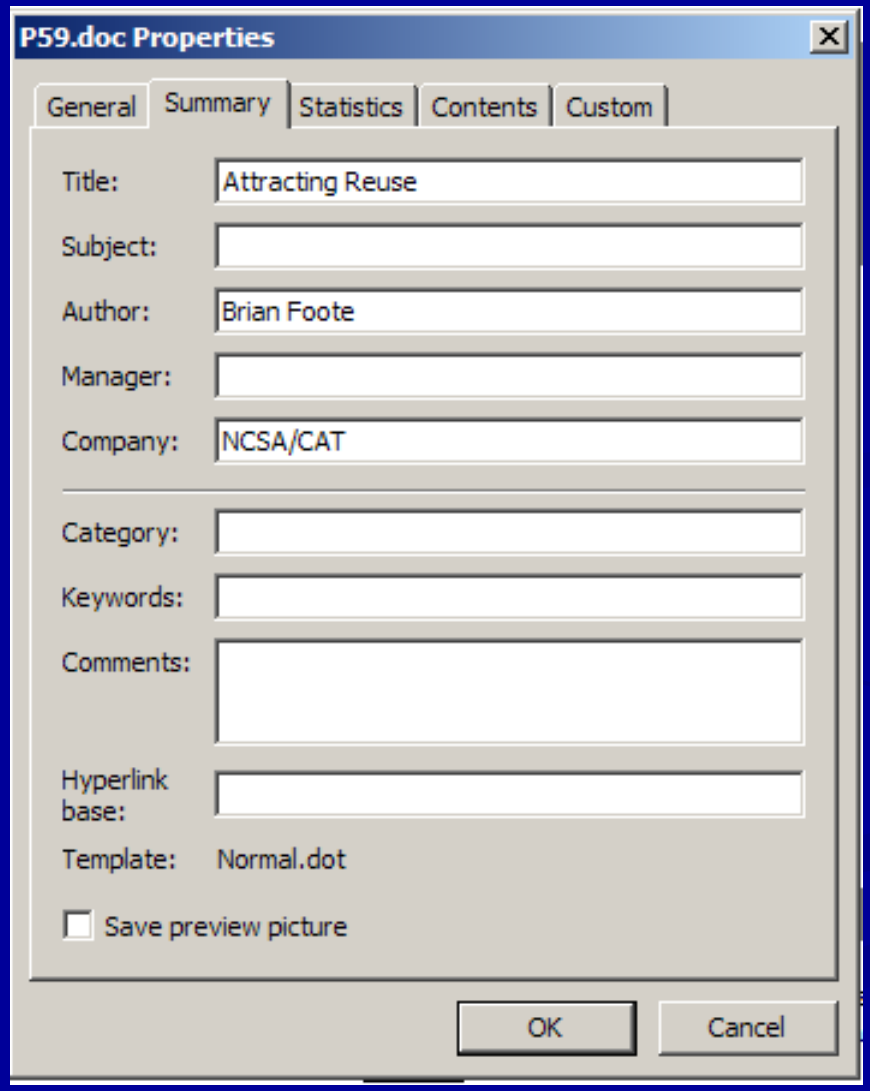

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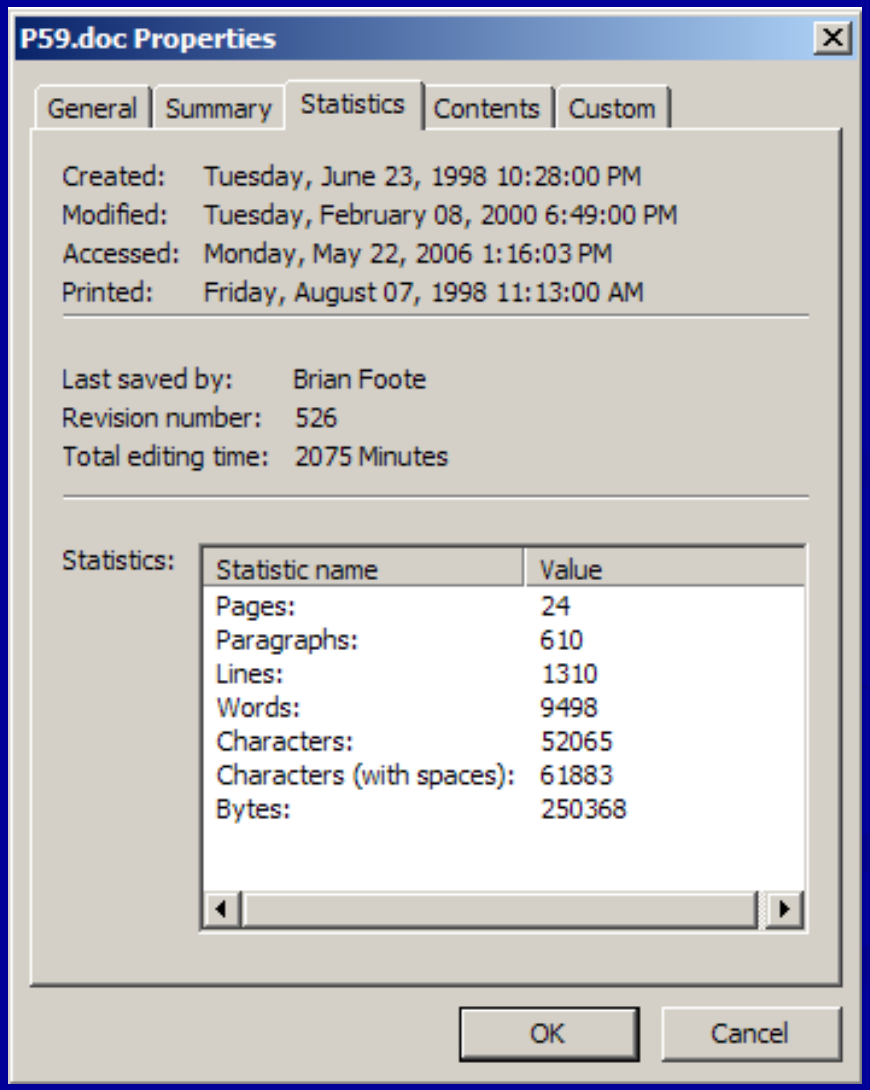

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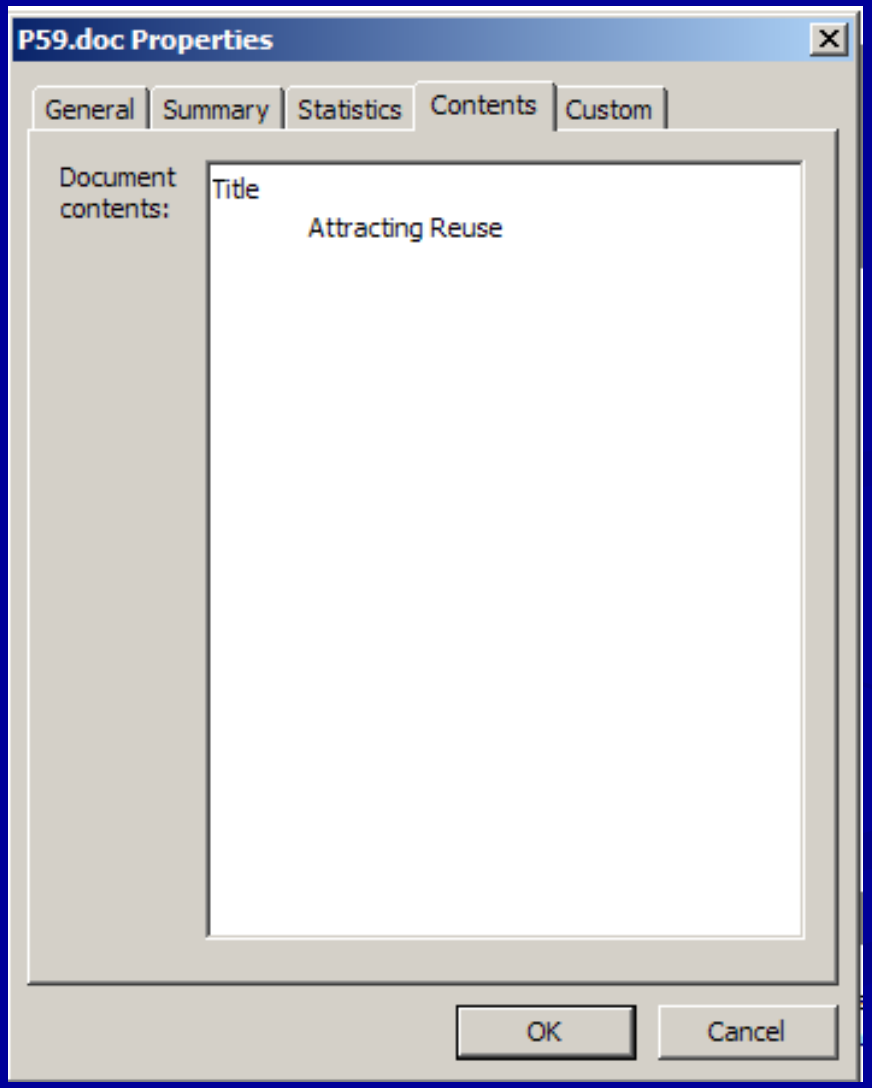

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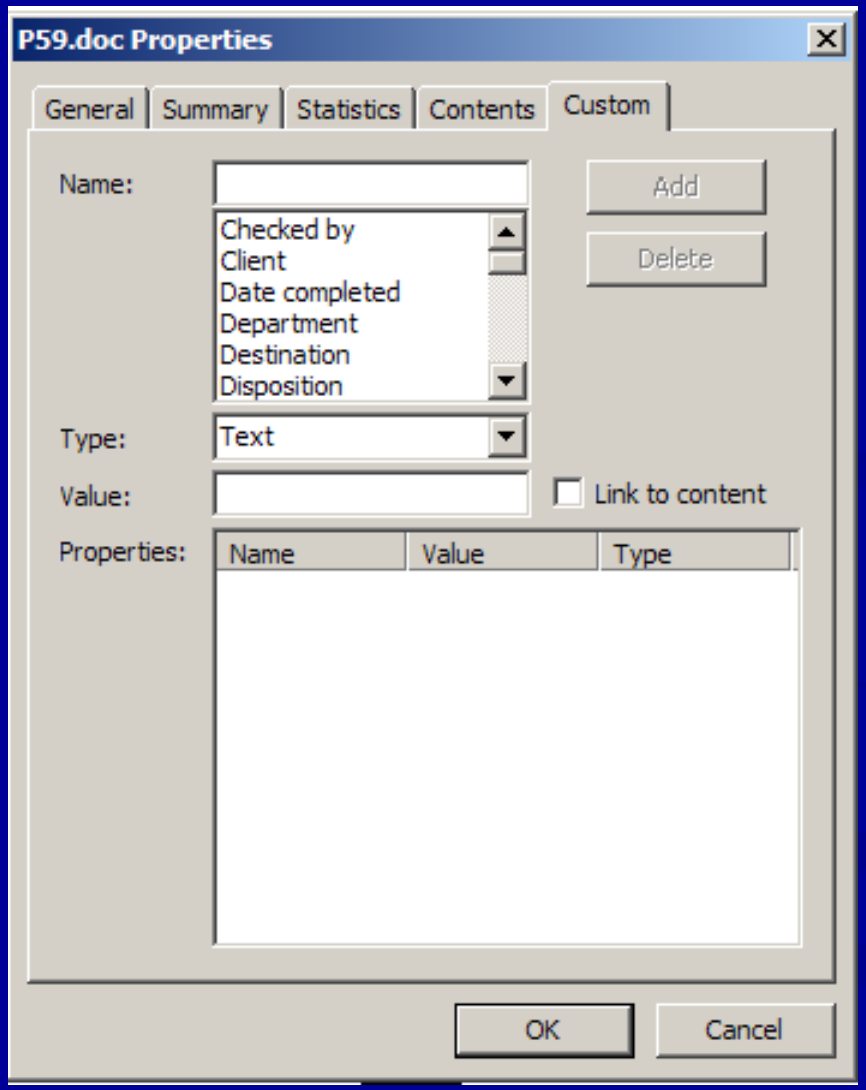

"Track Changes" Metadata

DRAFT
April 14, 2006

RULE 5.8: PROVISION OF LEGAL SERVICES FOLLOWING CATASTROPHIC INCIDENT

(a) Following the occurrence of a catastrophic incident in this jurisdiction, a lawyer admitted in another United States jurisdiction, and not disbarred or suspended from practice in any jurisdiction, may provide legal services on a temporary basis in this jurisdiction that are undertaken on a *pro bono* basis through a not-for-profit organization with offices in this jurisdiction and which is authorized to provide legal services in this jurisdiction either in its own name or through employed or cooperating lawyers.

(b) Following the occurrence of a catastrophic incident in another United States jurisdiction, a lawyer who is admitted and principally practices in that jurisdiction, and who is not disbarred or suspended in any jurisdiction, may provide legal services on a temporary basis in this jurisdiction that arise out of and are reasonably related to the lawyers' practice of law in the jurisdiction affected by the catastrophic incident.

(c) The chief [judge][justice] of this jurisdiction shall determine when a catastrophic incident occurs in this or another jurisdiction within the meaning of this rule. The authority granted by this rule shall end [60] days after the chief [judge][justice] declares that the circumstances leading to the determination of a catastrophic incident have ended except that a lawyer representing clients in this jurisdiction pursuant to paragraph (a) is authorized to continue the representation for such longer period as is reasonably necessary to complete the work.

(d) The authority granted by this rule does not include appearances in a court in this jurisdiction.

Comment

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“Track Changes” Metadata

February 2007 doc.: IEEE 802.22-07/0063r1

IEEE P802.22
Wireless RANs

Status of PHY parameters discussion				
Date: 2007-03-07				
Author(s):				
Name	**Company**	**Address**	**Phone**	**email**
Gerald Chouinard	Communications Research Centre, Canada	3701 Carling Ave., Ottawa, Ontario, Canada K2H 8S2	613-998-2500	gerald.chouinard@crc.ca

Deleted: 01-30

Abstract

This contribution tries to summarize the status of the discussion on the 802.22 PHY parameters as of the end of the January 2007 session in London, U.K. for the purpose of focussing the discussion that will take place over teleconference calls between the two sessions so that finaldecisions can be made before or at the Orlando March session so that an agreed set of PHY parameters can be include in the Draft 1.0 for Working Group Balloting.

The state of discussion on each key PHY parameter is given along with some observations from the perspective of the author and a “way forward” is proposed to try to accelerate the consensus

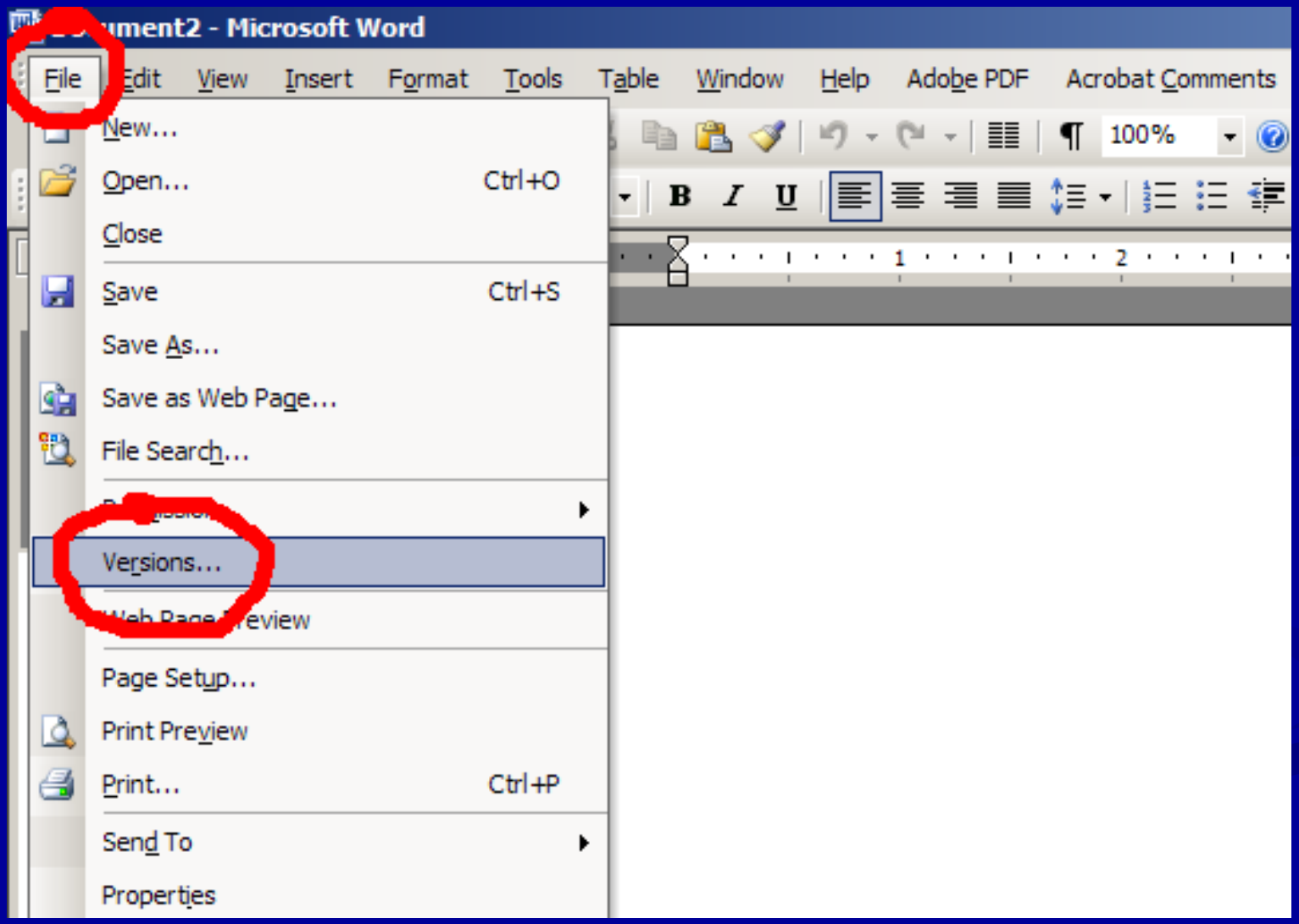
Inserted **G. Chouinard** **2/5/2007 12:22:**

What is the spreading method for the SCH? (Comments: #187, p.10, #93, p. 28, #525, #231, p.37, #179, #16, #17, p.41, #247, p 57, #493, #491, #96, p.58, #115, #250 p.61)

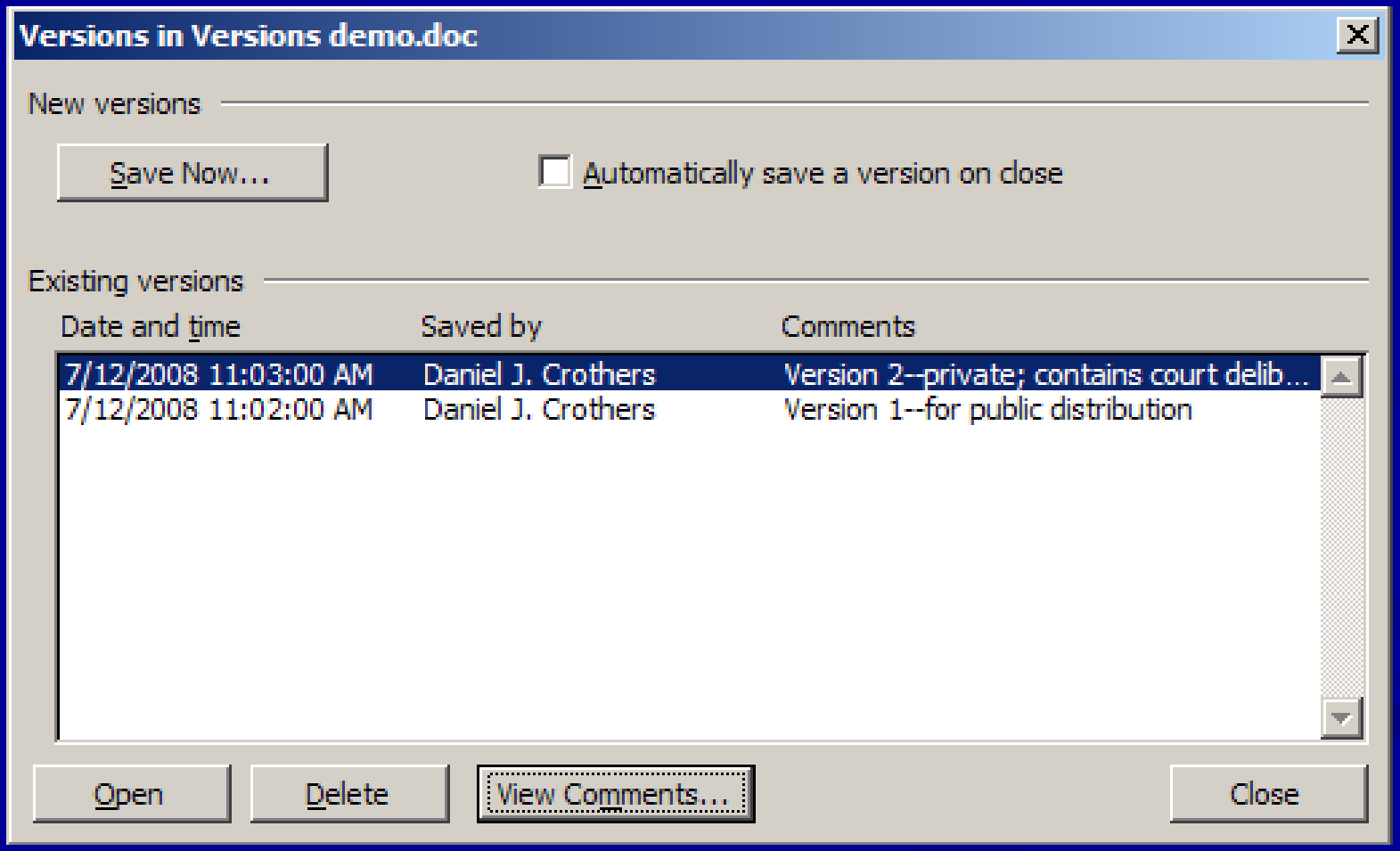
Inserted **G. Chouinard** **2/5/2007 3:57:**

(Comment: 39, p.20, 252, p.62)

“Versions” Metadata



“Versions” Metadata

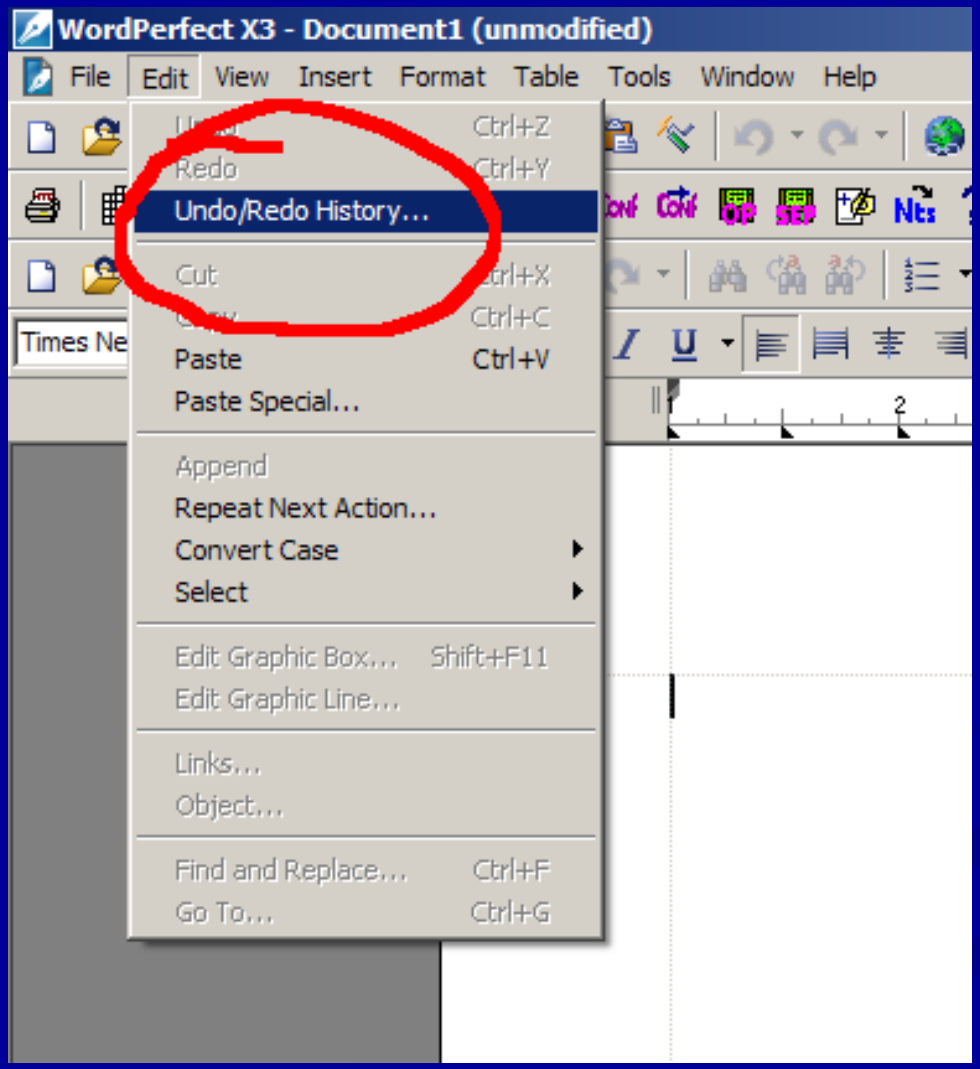


Metadata: WordPerfect

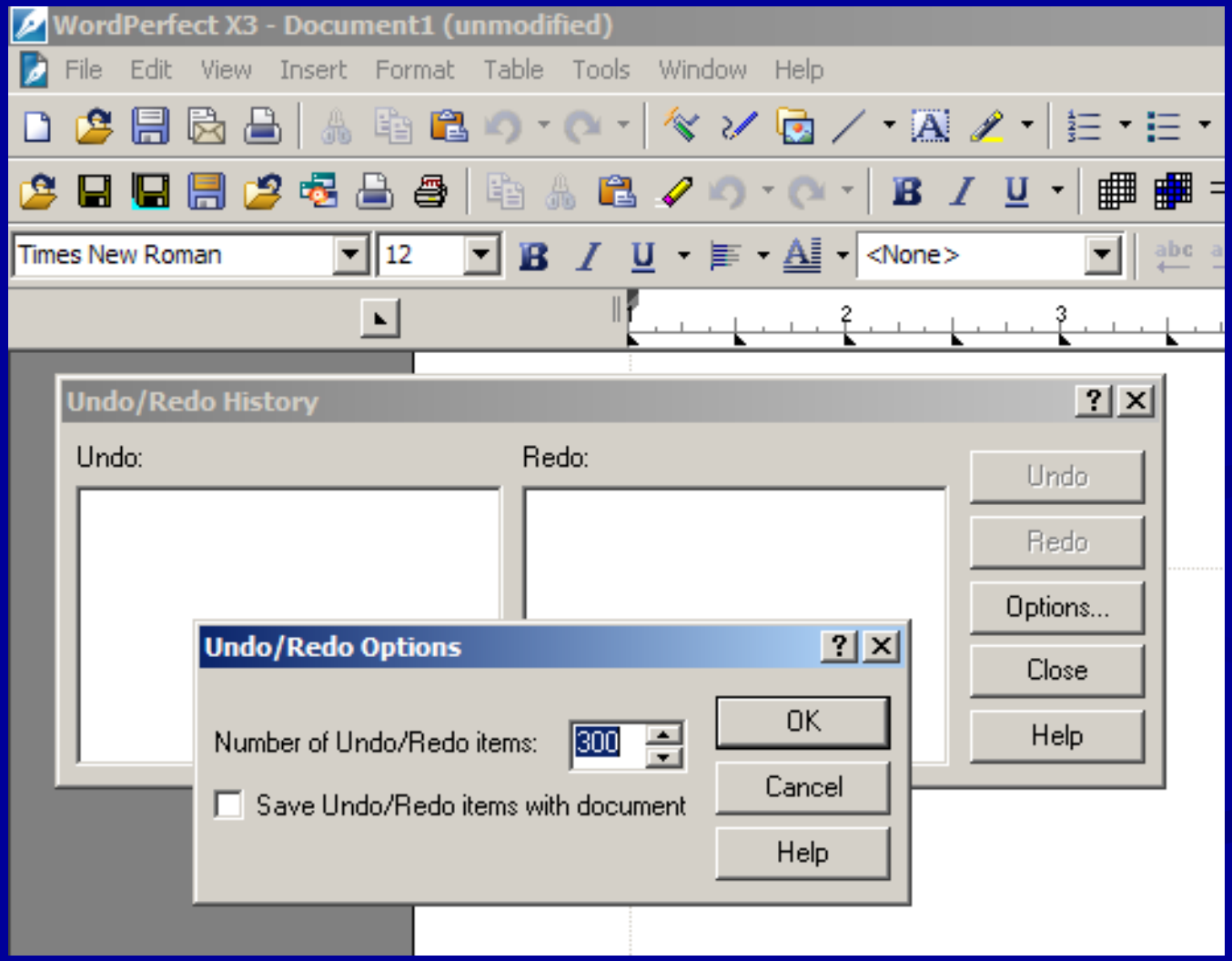
- Examples of metadata that may be stored in WordPerfect documents include:
  - comments and hidden text
  - document revision annotations
  - undo/redo history
  - your username, initials, and company or organization name
  - document summary information
  - header and footer information

http://www.corel.com/content/pdf/wpo12/Minimizing_Metadata_In_WordPerfect12.pdf

Metadata: WordPerfect



Metadata: WordPerfect



Metadata Solutions

- Turn off “Track Changes” before working on documents, unless you want to preserve record of changes
- Check Microsoft Office documents before sending to third party to determine whether any comments, tracked changes, versions or other metadata exist

Metadata Solutions

- Remove all “native” format (i.e. Word) documents from your website
- Do not transfer (i.e. email) native format documents to third parties
- Remove metadata from templates to reduce metadata inherited from previously used documents

Metadata Solutions

- Convert native format files to, or save as, .rtf or .txt file
- “Print” or convert documents to Adobe Acrobat (.pdf) format
- Buy commercial “scrubbing” software
  - i.e. Metadata Assistant (payneconsulting.com)
- Follow instructions from software company
  - i.e. www.support.microsoft.com

Questions AND Comments

Daniel Crothers

dcrothers@ndcourts.gov

701-328-4204

ESI Loss

- Laptop computers and “Thumb drives” or USB sticks

Los Angeles Times | World

Sports | California | Local | Business | Entertainment | World | National | News

Archive for Monday, April 10, 2006

U.S. Military Secrets for Sale at Afghan Bazaar

By Paul Watson
April 10, 2006 *in print edition A-1*

No more than 200 yards from the main gate of the sprawling U.S. base here, stolen computer drives containing classified military assessments of enemy targets, names of corrupt Afghan officials and descriptions of American defenses are on sale in the local bazaar.

Reference Material and “how to” Slides

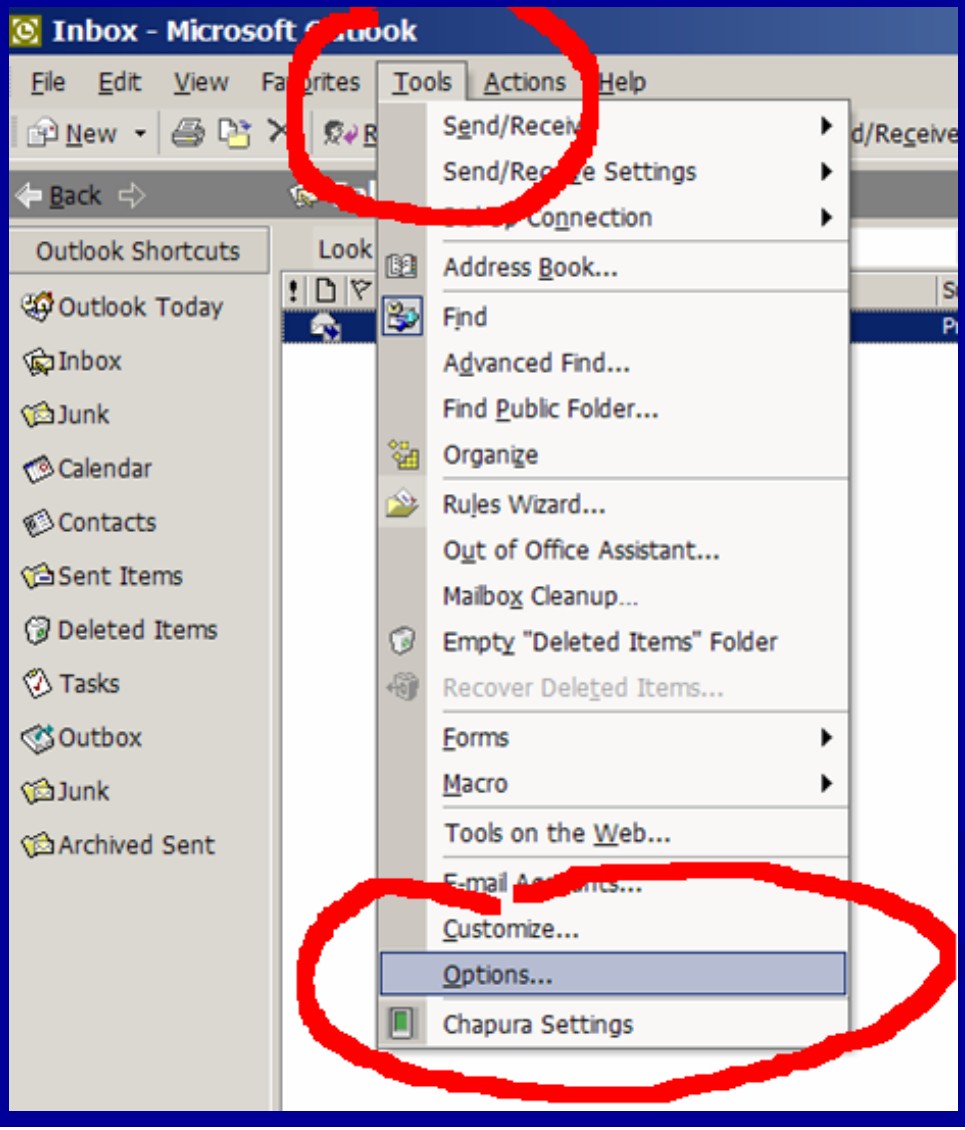
Obtaining More Information

- Technology articles:
  - Daniel J. Crothers, Lawyer Ethics and Technology: Email Confidentiality, *The Gavel*, May 2008, at 12-13, available at http://www.sband.org/data/gavelupfiles/May08.pdf
  - Daniel J. Crothers, Telephone Confidentiality, *The Gavel*, August 2008, at 24-25, available at http://www.sband.org/data/gavelupfiles/August08.pdf
  - Daniel J. Crothers, Wireless Computer Networks, Part I, *The Gavel*, November 2008, at 12-13, available at http://www.sband.org/data/gavelupfiles/nov08.pdf. and Wireless Computer Networks, Part II, *The Gavel*, http://www.sband.org/data/gavelupfiles/feb09.pdf

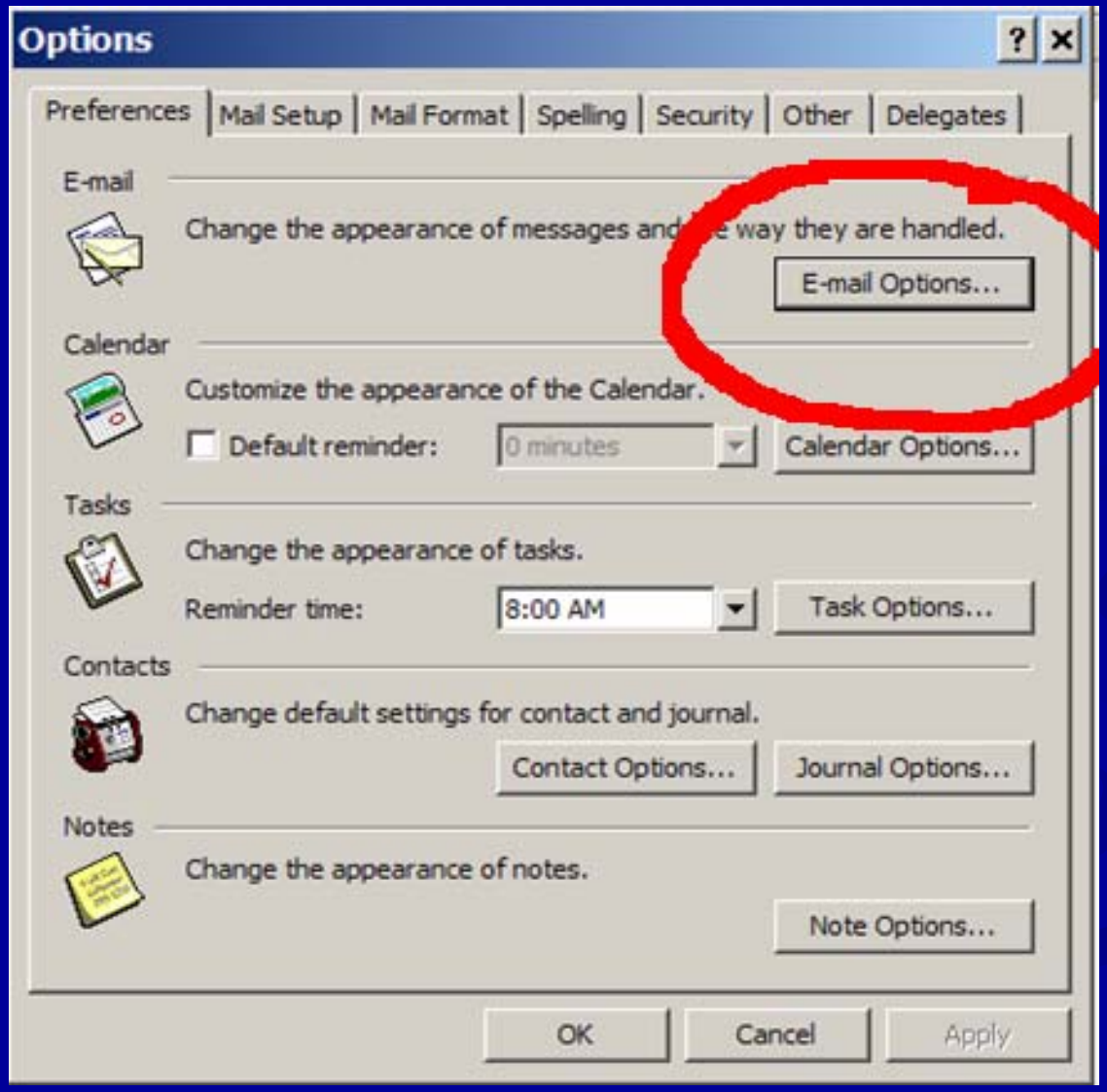
Obtaining More Information

- Resources on the web:
  - http://www.ajs.org/ethics/eth_advis_comm_links.asp
    - American Judicature Society links to judicial ethics
  - www.legalethics.com
    - General legal ethics resources
  - http://www.abanet.org/judicialethics/resources/resources_state.html
    - State judicial ethics codes and opinions

Disabling Email “auto-complete”



Disabling Email “auto-complete”



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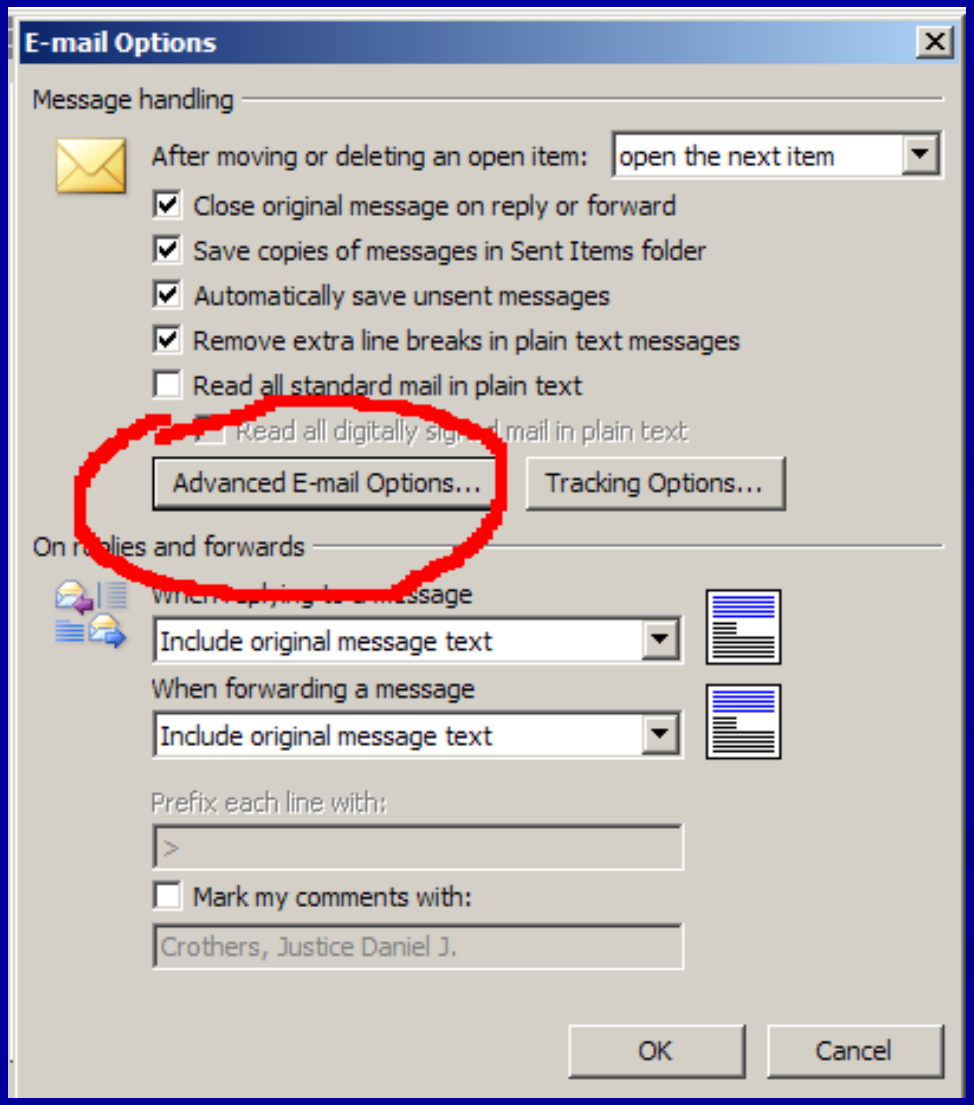
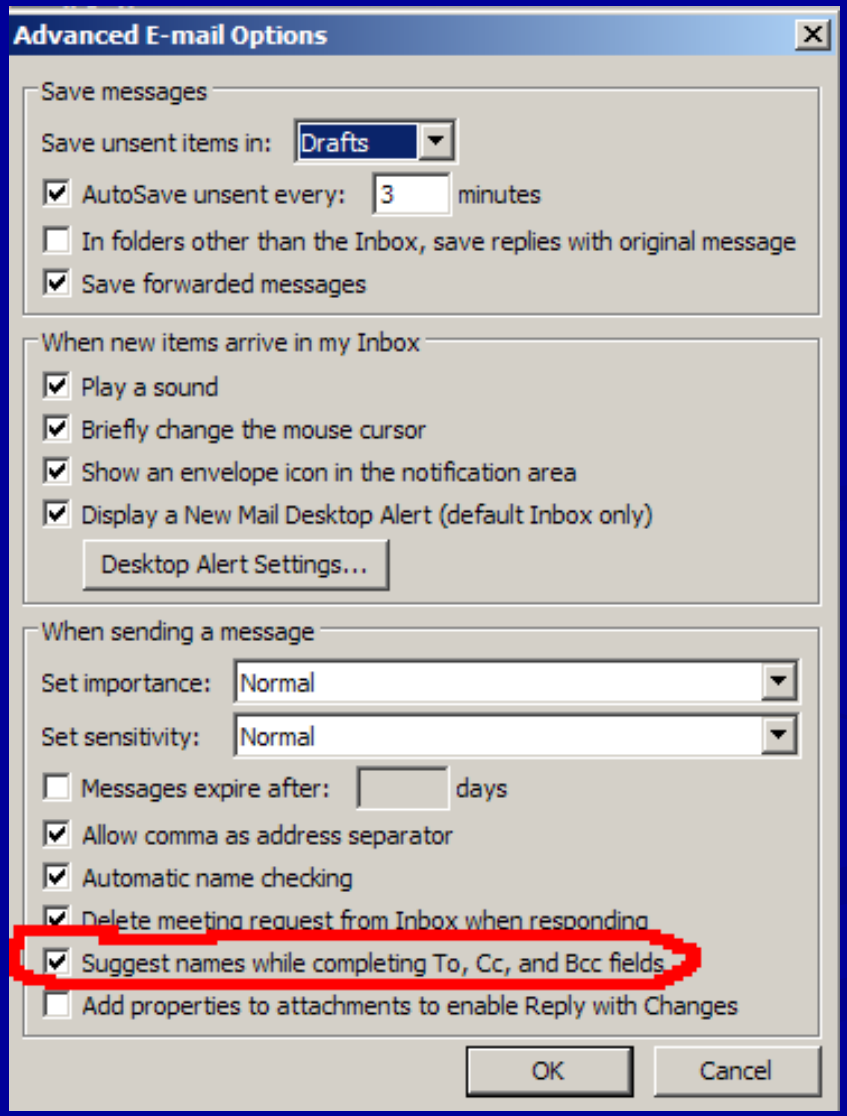
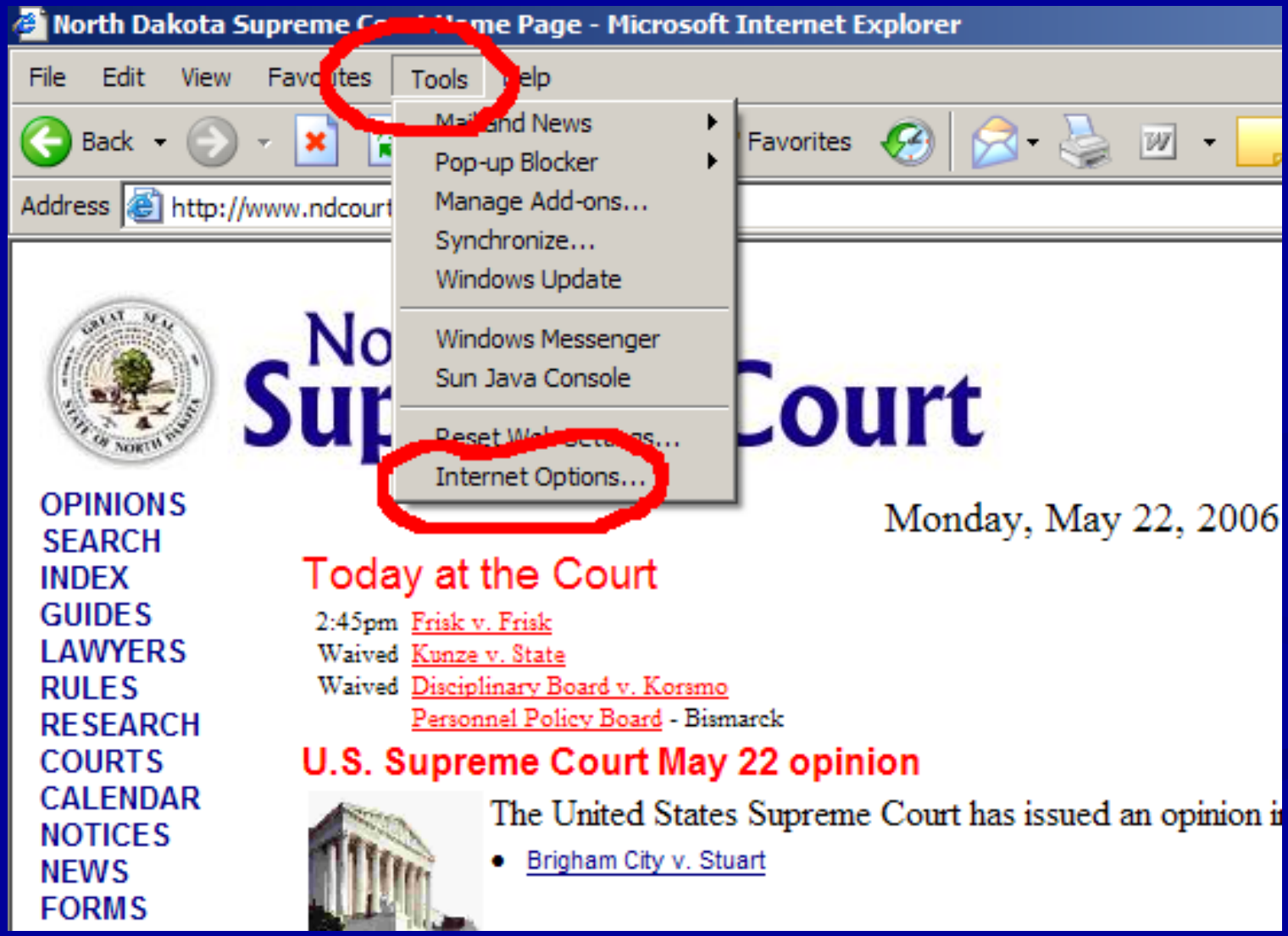


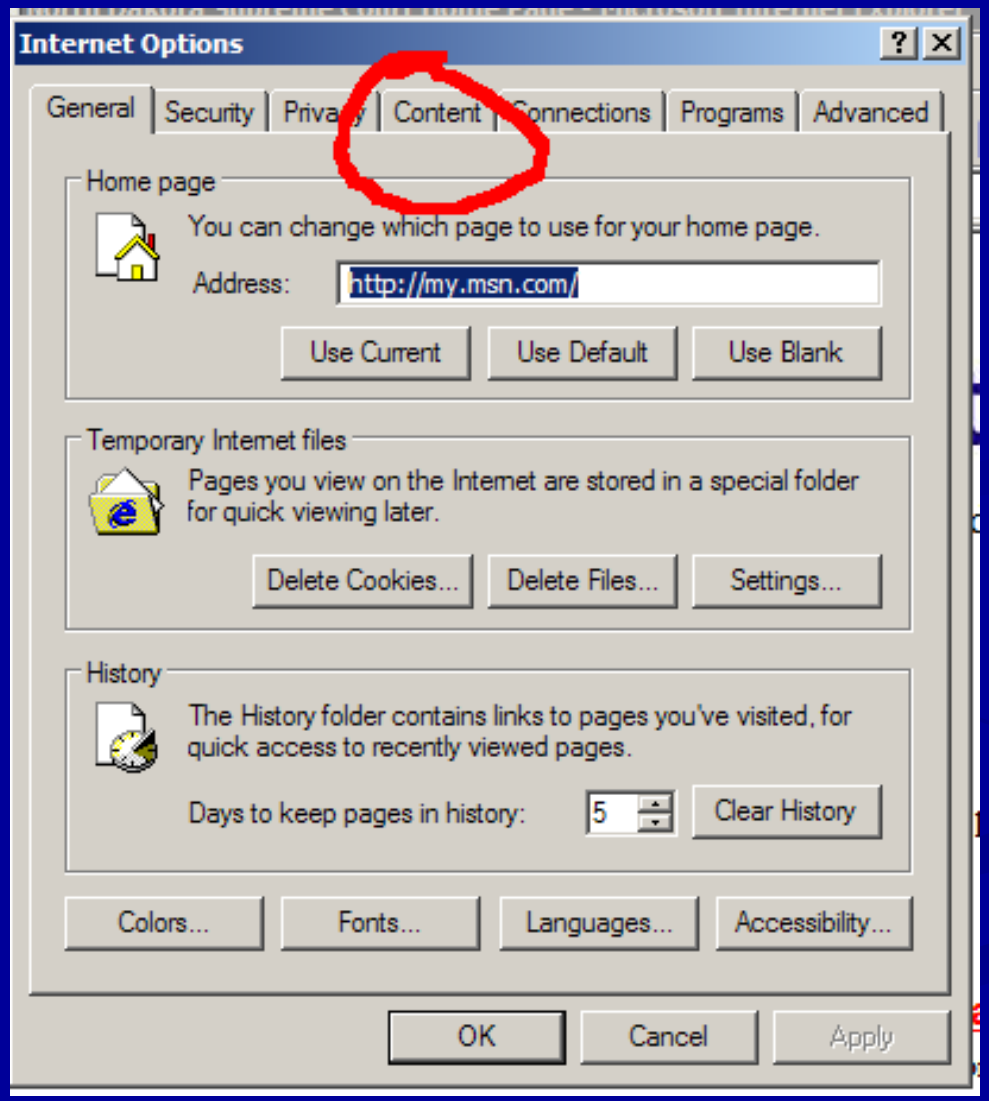
Disabling Email “auto-complete”



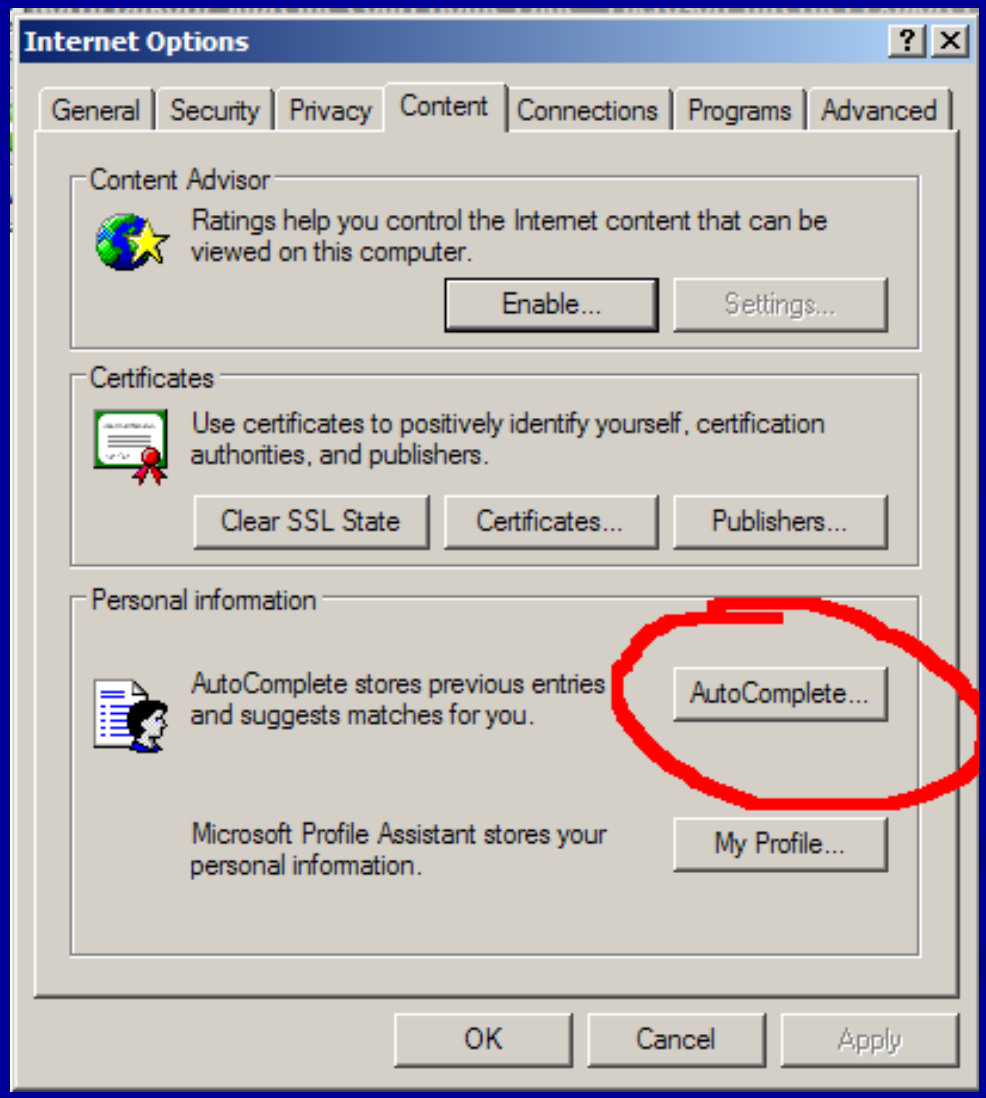
Protecting Passwords



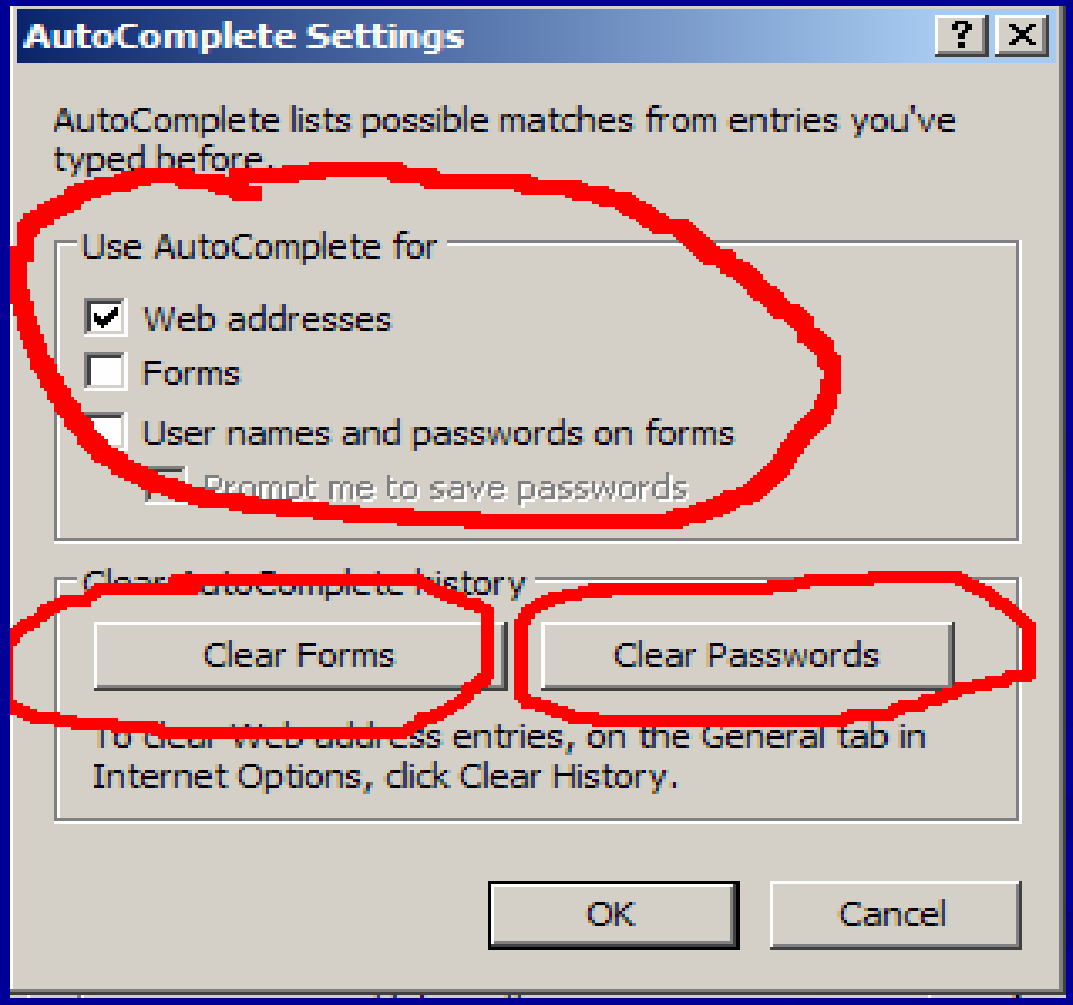
Protecting Passwords



Protecting Passwords



Protecting Passwords



Protecting Passwords

Protecting Passwords

- MSN and Hotmail login screen:

Protecting Passwords

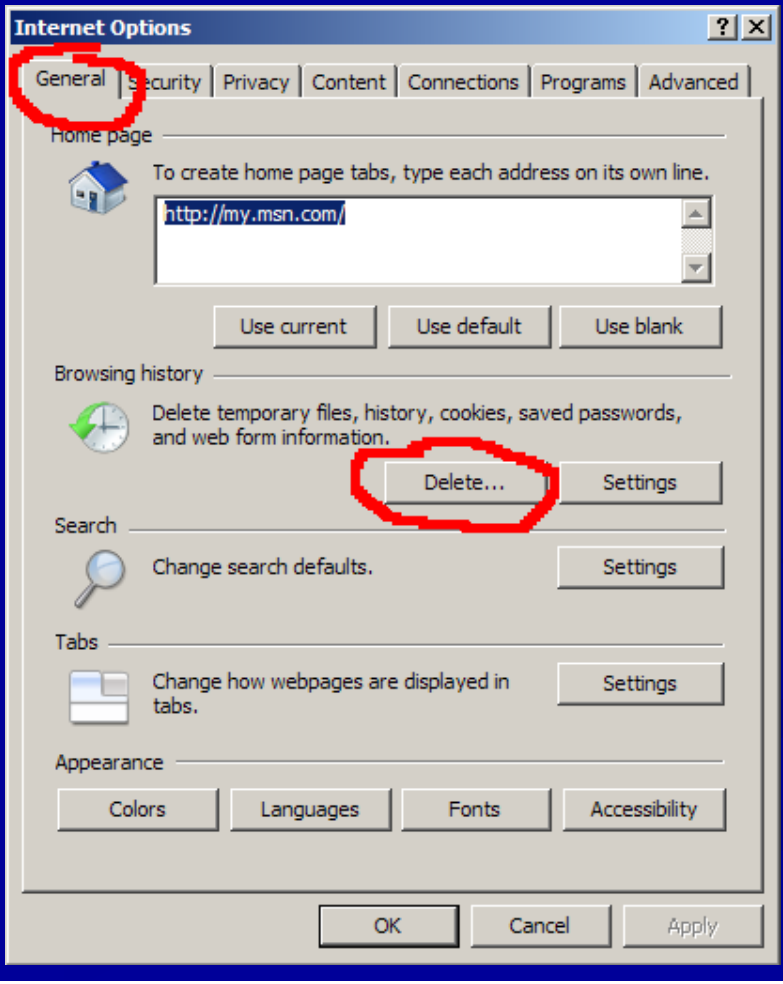
- Third-party webpage login

Erasing Your Tracks

- Microsoft Explorer

Erasing Your Tracks

- Microsoft Explorer



Erasing Your Tracks

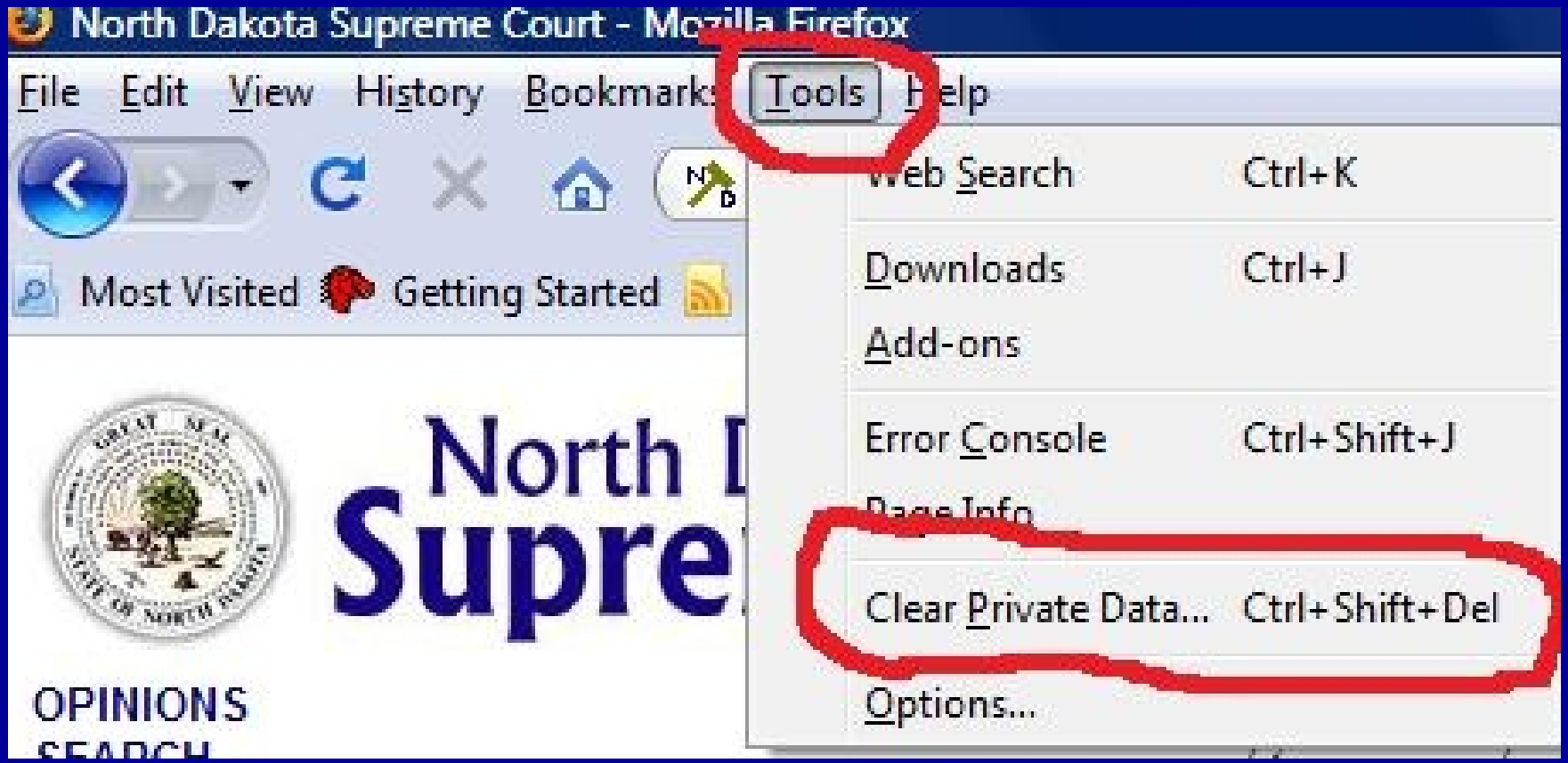
- Netscape procedure—<u>before</u> using:
  - Click “Tools”
  - Click “Options”
  - In “Security and Privacy” box
    - Click “Privacy”
    - Click checkbox “Clear My Tracks on Exit”
    - Expand other options and check “clear on exit”

Erasing Your Tracks

- Netscape procedure—<u>after</u> using:
  - Click “Tools”
  - Click “Options”
  - In “Security and Privacy” box
    - Click “Privacy”
    - Click “Clear all” and “Clear” for all options displayed

Erasing Your Tracks

- Mozilla Firefox browser



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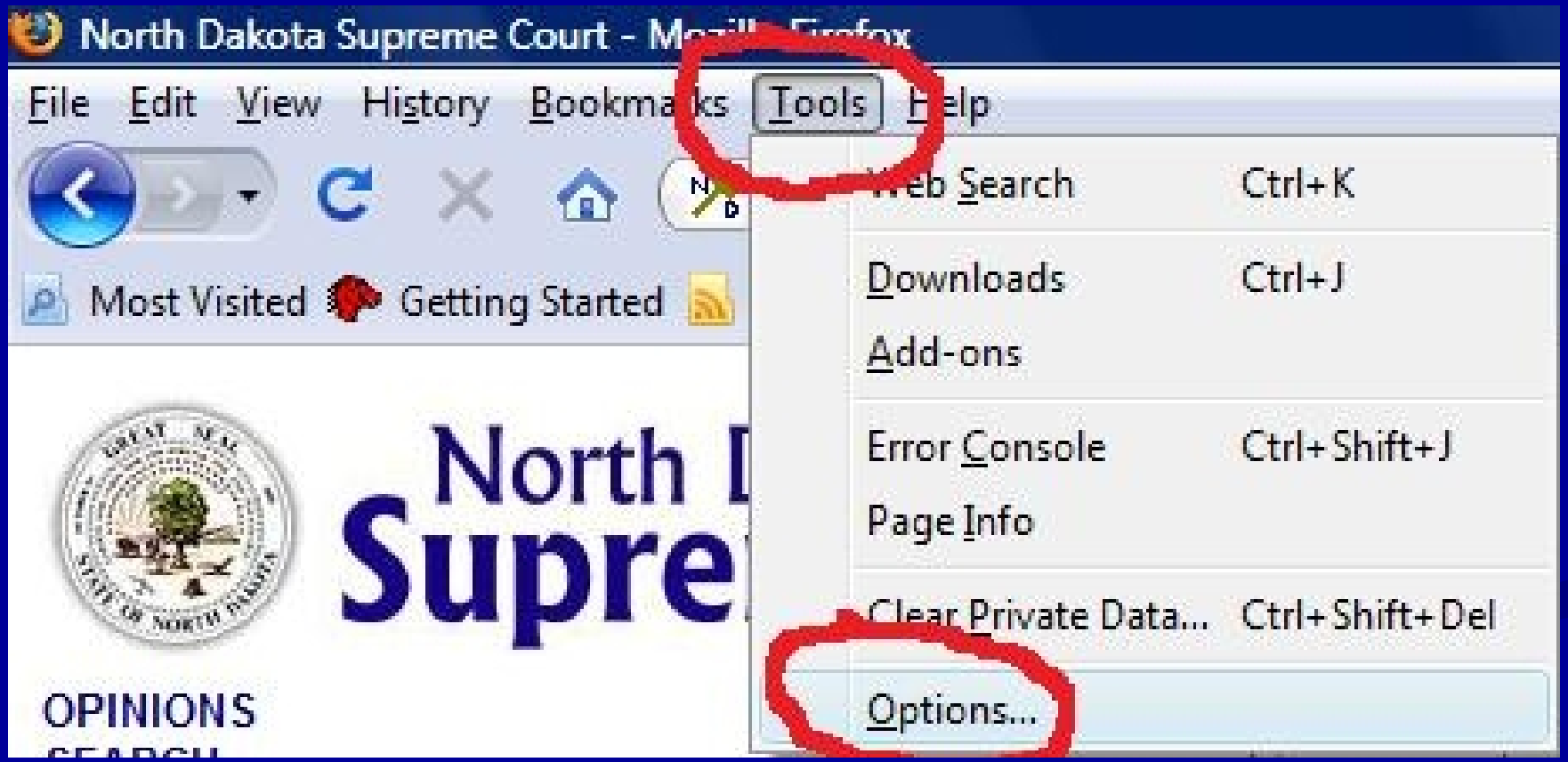

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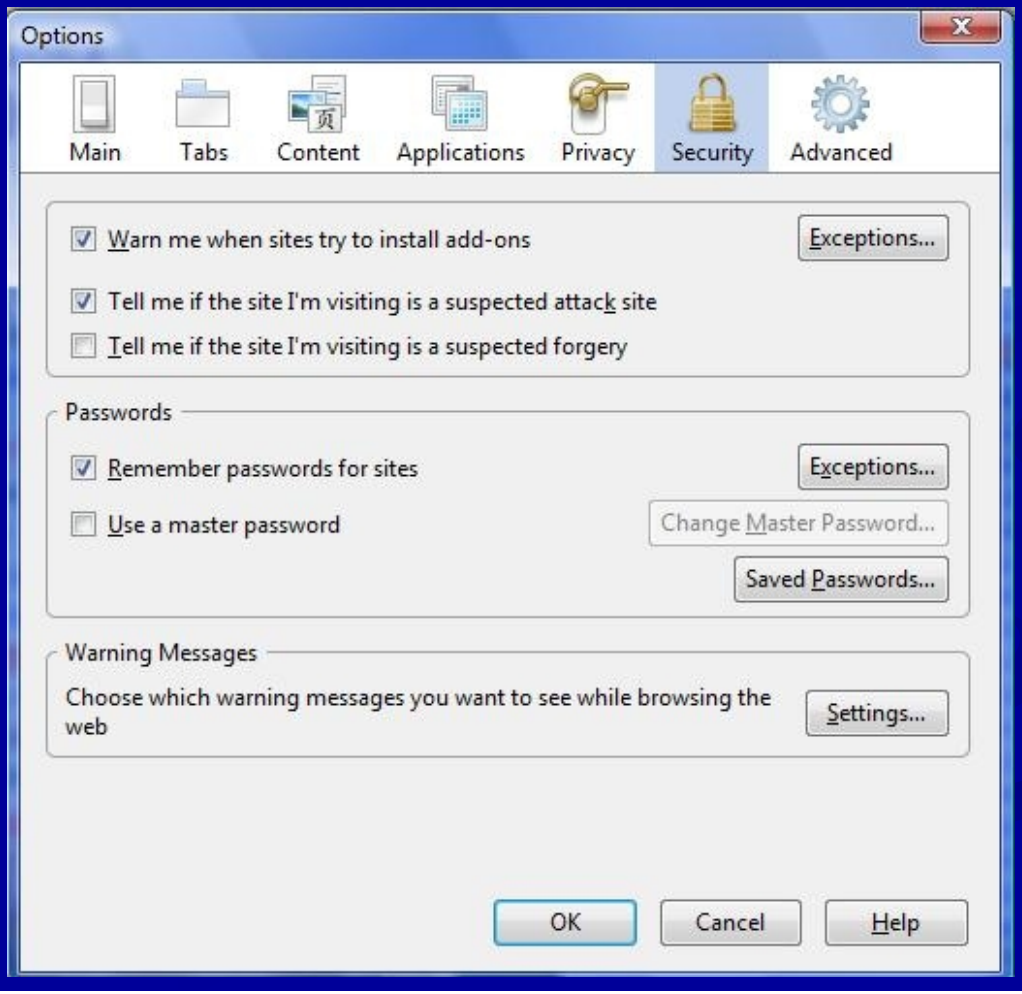
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