

# Ethics and Technology

Daniel J. Crothers, Justice  
North Dakota Supreme Court

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# 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

# 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)

# 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 business and Microsoft Internet judicial email by entering password
  - Any problems?
  - See reference slides starting with “clearing passwords” and “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

# Using Wireless Telephones

- Digital portable and cellular telephones may be used to communicate confidential information
  - BUT only while using digital service

# Using Wireless Telephones

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

# 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](mailto: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](http://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

- 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

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

# 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 (11<sup>th</sup> 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

# 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](http://www.corel.com/content/pdf/wpo12/Minimizing_Metadata_In_WordPerfect12.pdf)

# 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](http://payneconsulting.com))
- Follow instructions from software company
  - i.e. [www.support.microsoft.com](http://www.support.microsoft.com)



# Questions AND Comments

# 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

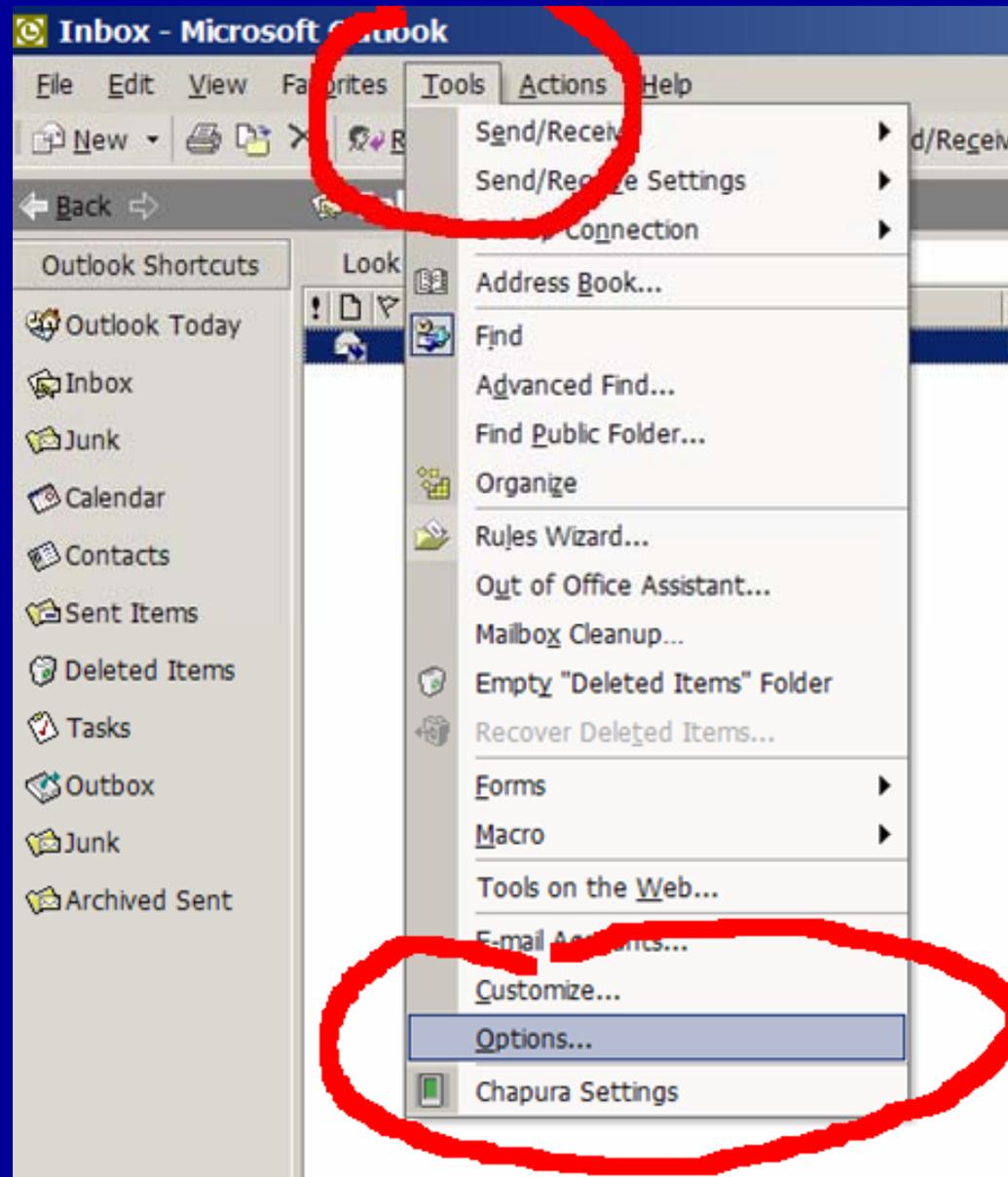
# Obtaining More Information

- 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>

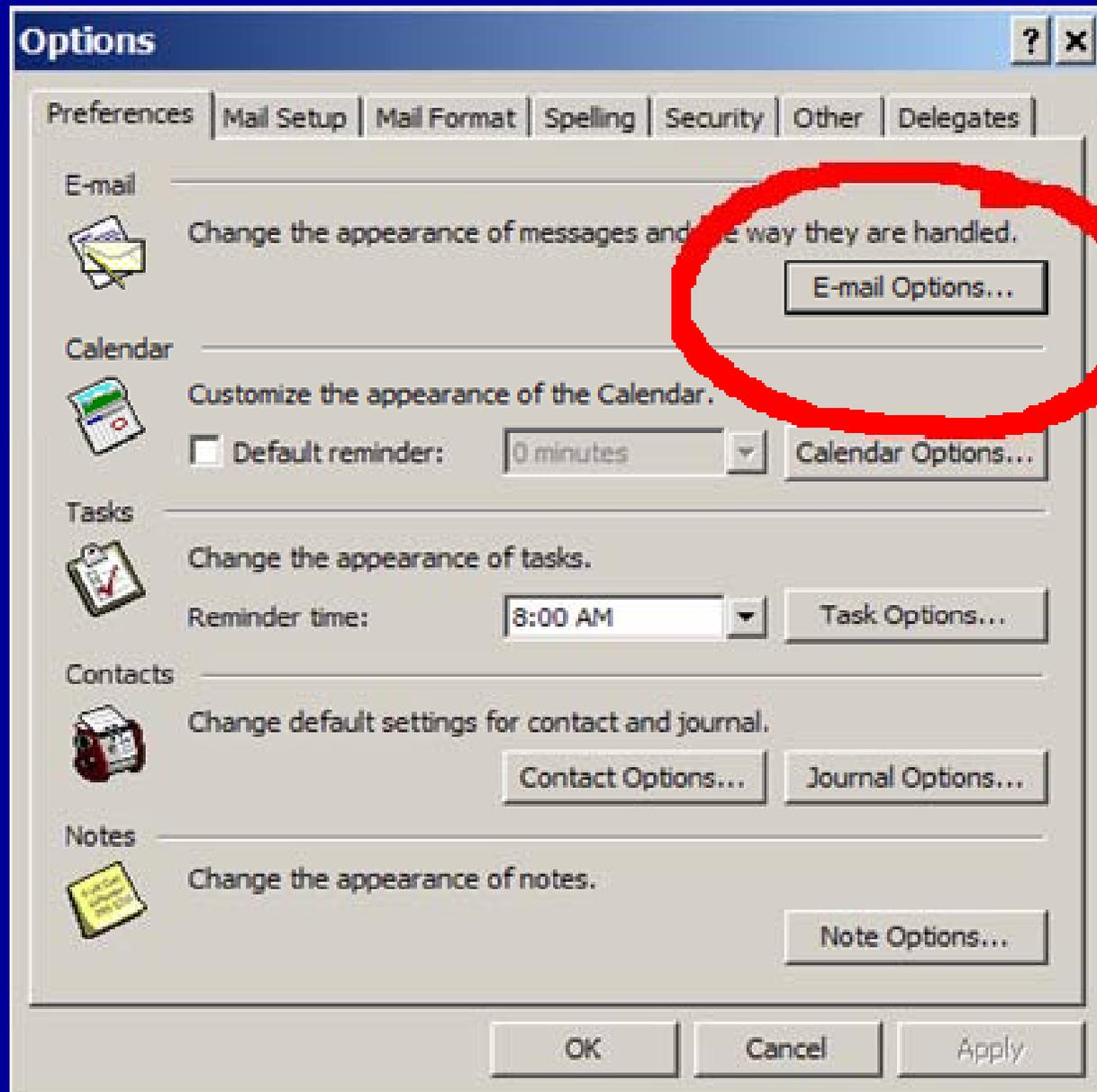
# Obtaining More Information

- Resources on the web:
  - [http://www.ajs.org/ethics/eth\\_advis\\_comm\\_links.asp](http://www.ajs.org/ethics/eth_advis_comm_links.asp)
    - American Judicature Society links to judicial ethics
  - [www.legalethics.com](http://www.legalethics.com)
    - General legal ethics resources
  - [http://www.abanet.org/judicialethics/resources/resources\\_state.html](http://www.abanet.org/judicialethics/resources/resources_state.html)
    - State judicial ethics codes and opinions

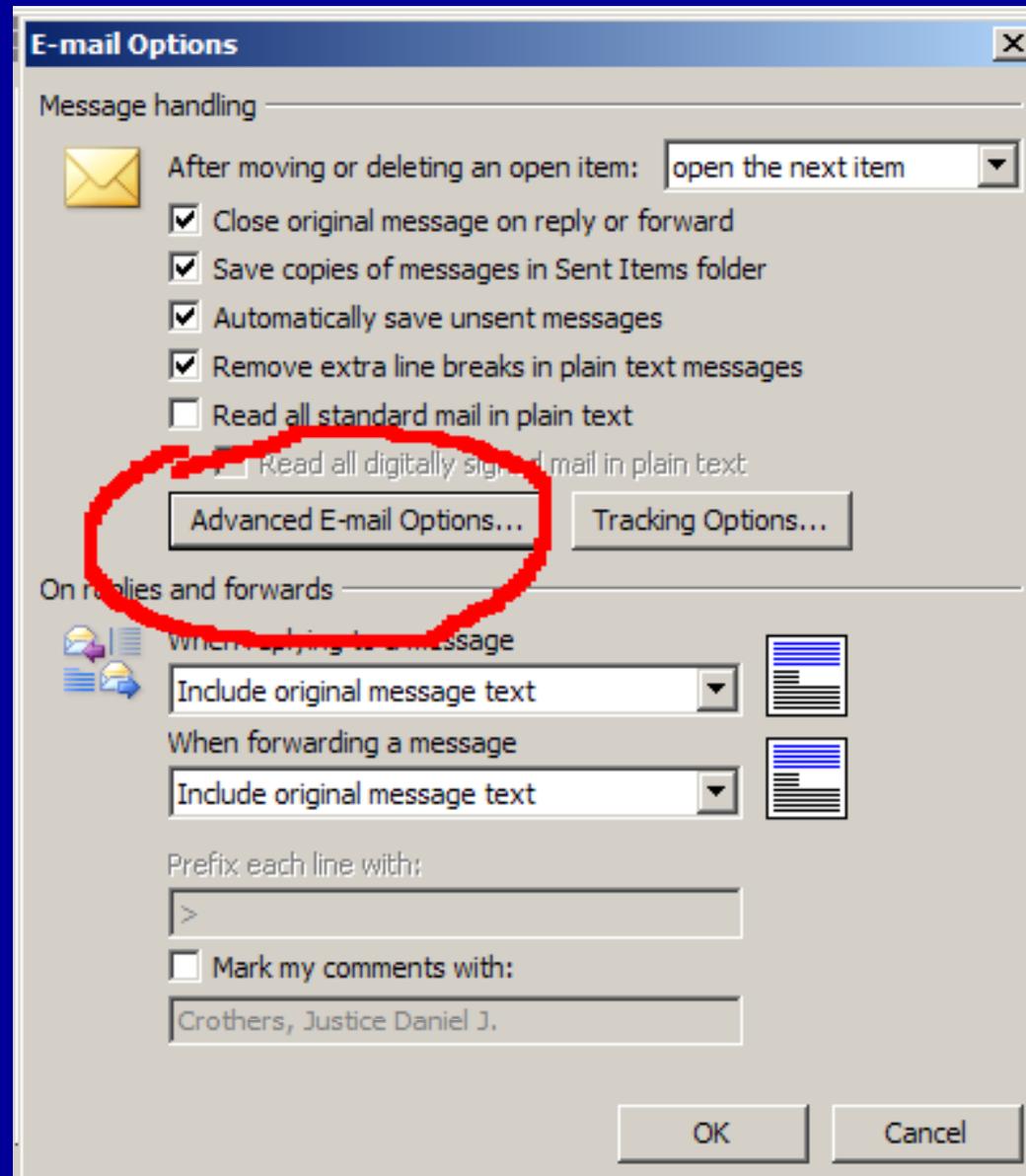
# Disabling Email “auto-complete”



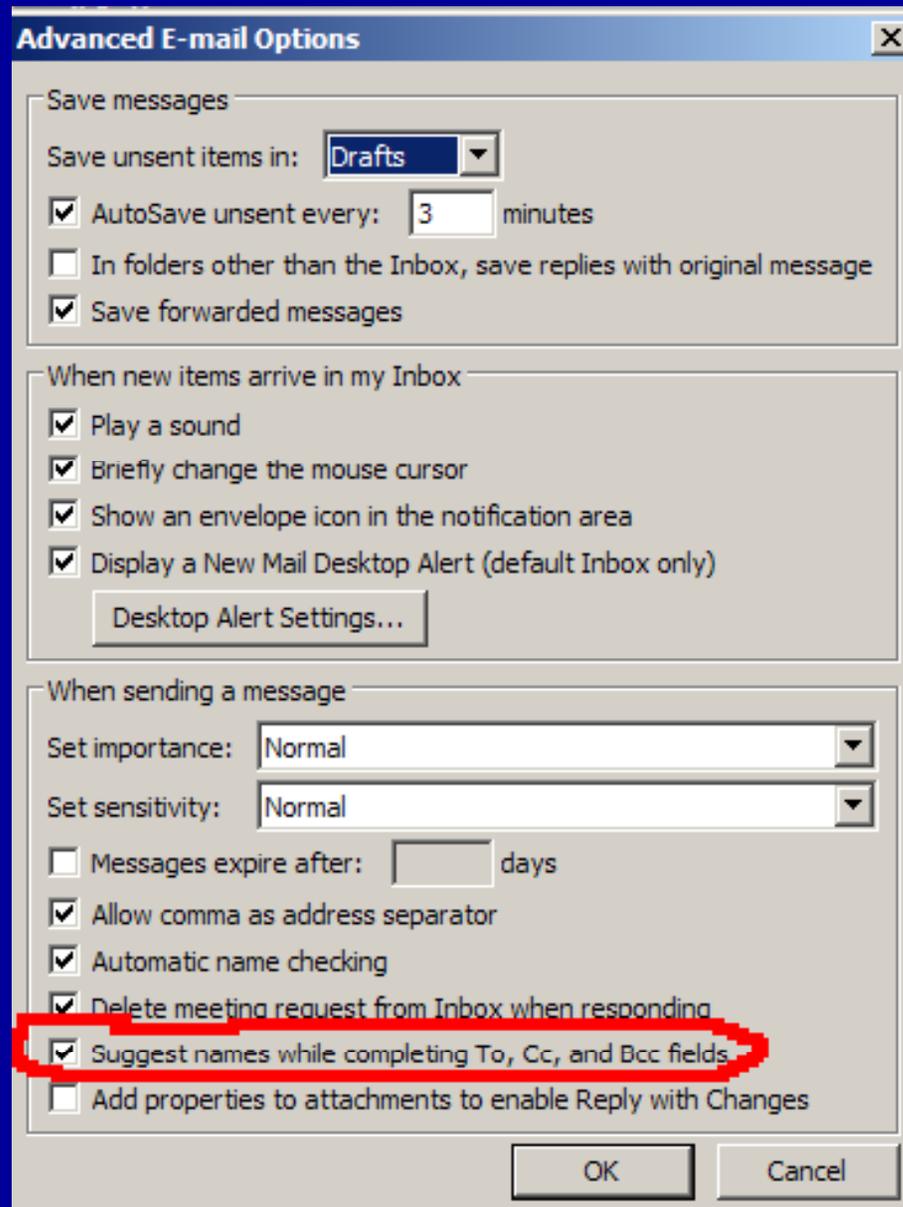
# Disabling Email “auto-complete”



# Disabling Email “auto-complete”



# Disabling Email “auto-complete”



**Advanced E-mail Options**

Save messages

Save unsent items in: **Drafts**

AutoSave unsent every: **3** minutes

In folders other than the Inbox, save replies with original message

Save forwarded messages

When new items arrive in my Inbox

Play a sound

Briefly change the mouse cursor

Show an envelope icon in the notification area

Display a New Mail Desktop Alert (default Inbox only)

Desktop Alert Settings...

When sending a message

Set importance: **Normal**

Set sensitivity: **Normal**

Messages expire after:  days

Allow comma as address separator

Automatic name checking

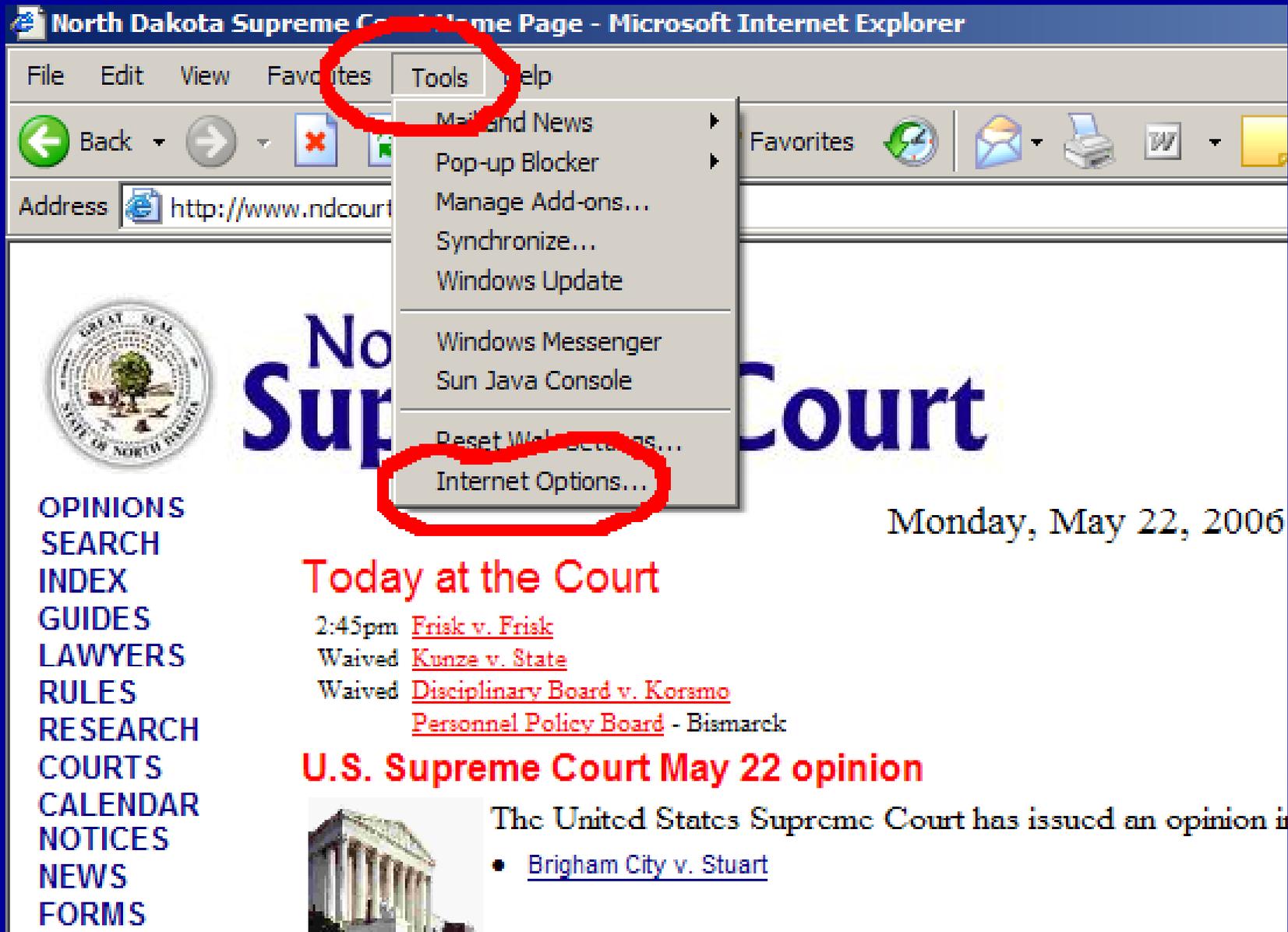
Delete meeting request from Inbox when responding

Suggest names while completing To, Cc, and Bcc fields

Add properties to attachments to enable Reply with Changes

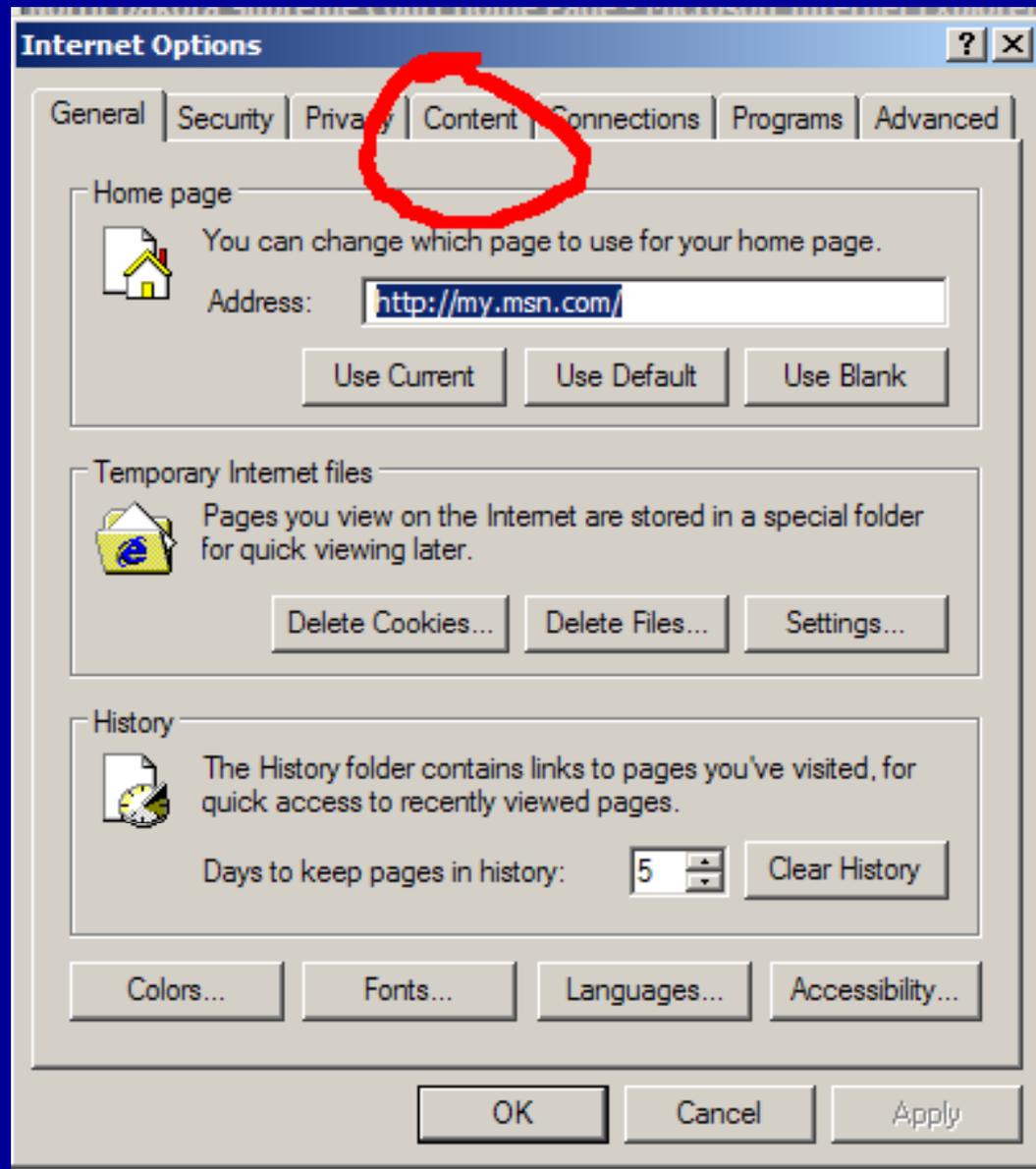
OK Cancel

# Protecting Passwords

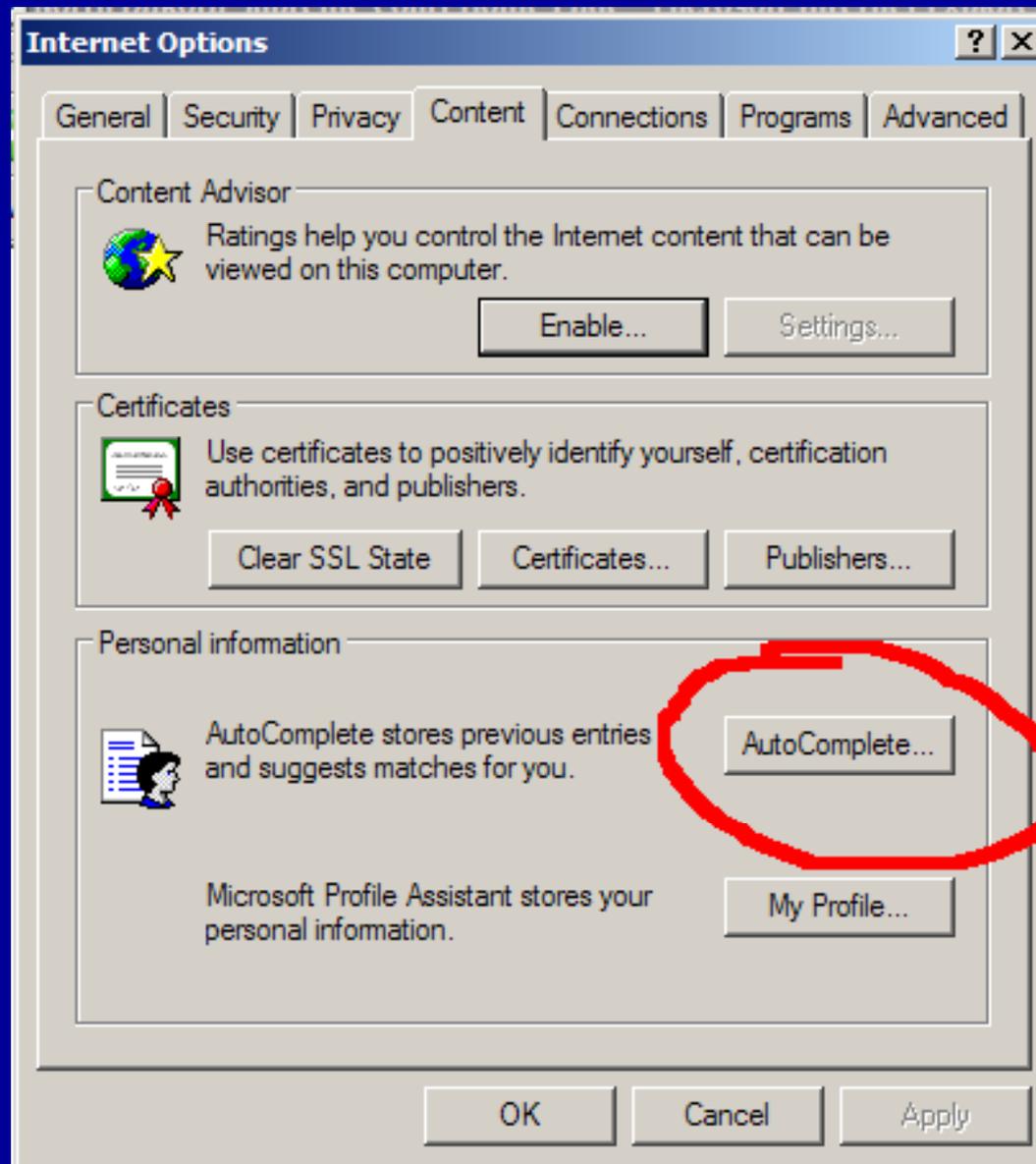


The screenshot shows a Microsoft Internet Explorer browser window. The title bar reads "North Dakota Supreme Court Home Page - Microsoft Internet Explorer". The menu bar includes "File", "Edit", "View", "Favorites", "Tools", and "Help". The "Tools" menu is open, displaying options such as "Mail and News", "Pop-up Blocker", "Manage Add-ons...", "Synchronize...", "Windows Update", "Windows Messenger", "Sun Java Console", "Reset Web Settings...", and "Internet Options...". The "Tools" menu and the "Internet Options..." option are circled in red. The browser's address bar shows "http://www.ndcour...". The main content area displays the North Dakota Supreme Court logo and the text "No Sup Court". A sidebar on the left lists navigation links: "OPINIONS", "SEARCH", "INDEX", "GUIDES", "LAWYERS", "RULES", "RESEARCH", "COURTS", "CALENDAR", "NOTICES", "NEWS", and "FORMS". The date "Monday, May 22, 2006" is shown in the top right. Below the date, the section "Today at the Court" lists cases: "2:45pm [Frisk v. Frisk](#)", "Waived [Kunze v. State](#)", and "Waived [Disciplinary Board v. Korsmo Personnel Policy Board](#) - Bismarck". A sub-section "U.S. Supreme Court May 22 opinion" features a small image of the Supreme Court building and a bullet point: "• [Brigham City v. Stuart](#)".

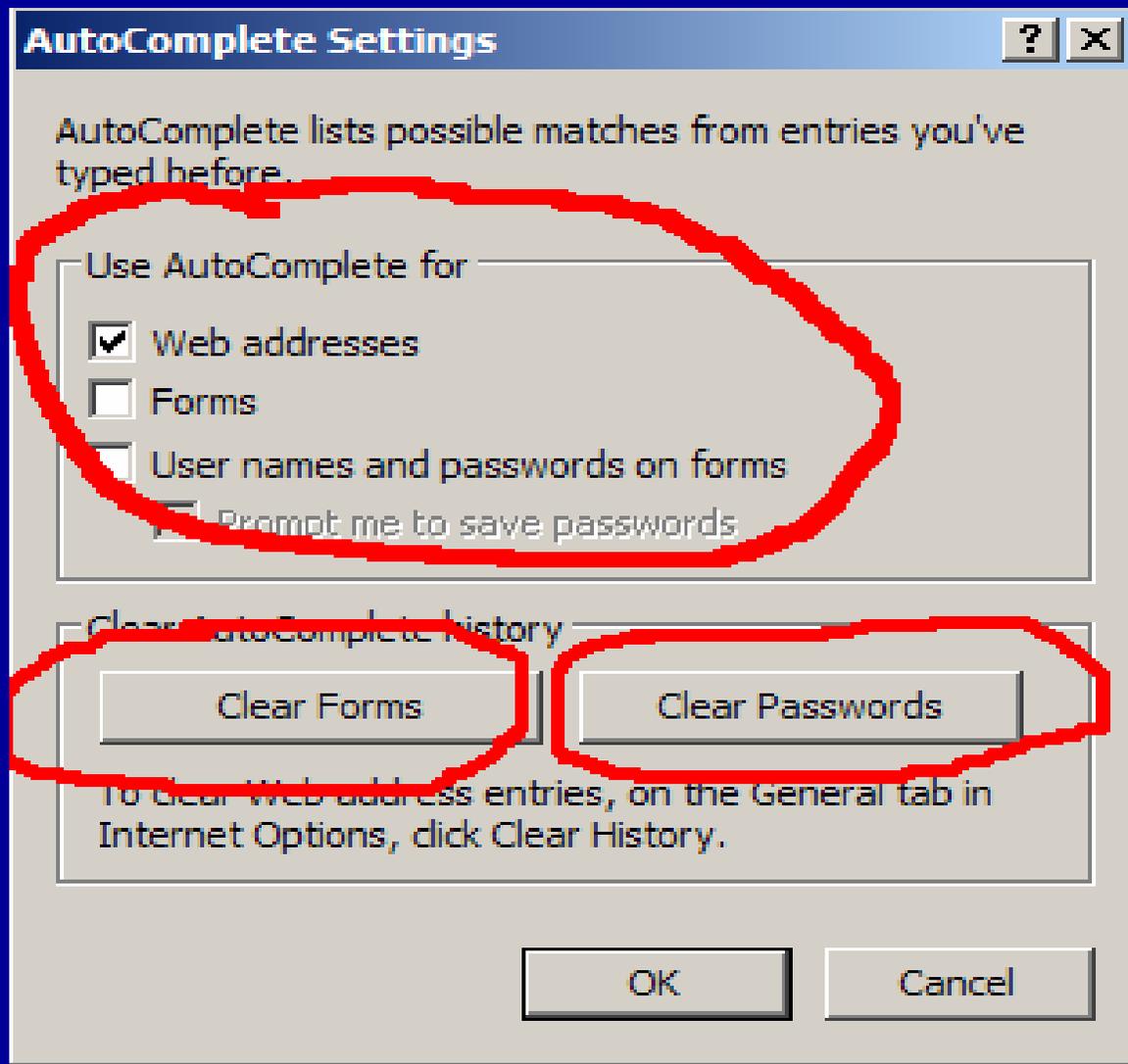
# Protecting Passwords



# Protecting Passwords



# Protecting Passwords



# Protecting Passwords



# Protecting Passwords

- MSN and Hotmail login screen:

Sign in

 Windows Live ID:   
(example555@hotmail.com)

Password:   
[Forgot your password?](#)

Remember me on this computer (?)  
 Remember my password (?)

[Use enhanced security](#)

# Protecting Passwords

## ■ Third-party webpage login

**Log In**

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E-mail:

Password:

This is a public or shared computer. Do not remember my information.

This is a private computer. Keep me logged in.

# Erasing Your Tracks

## ■ Microsoft Explorer

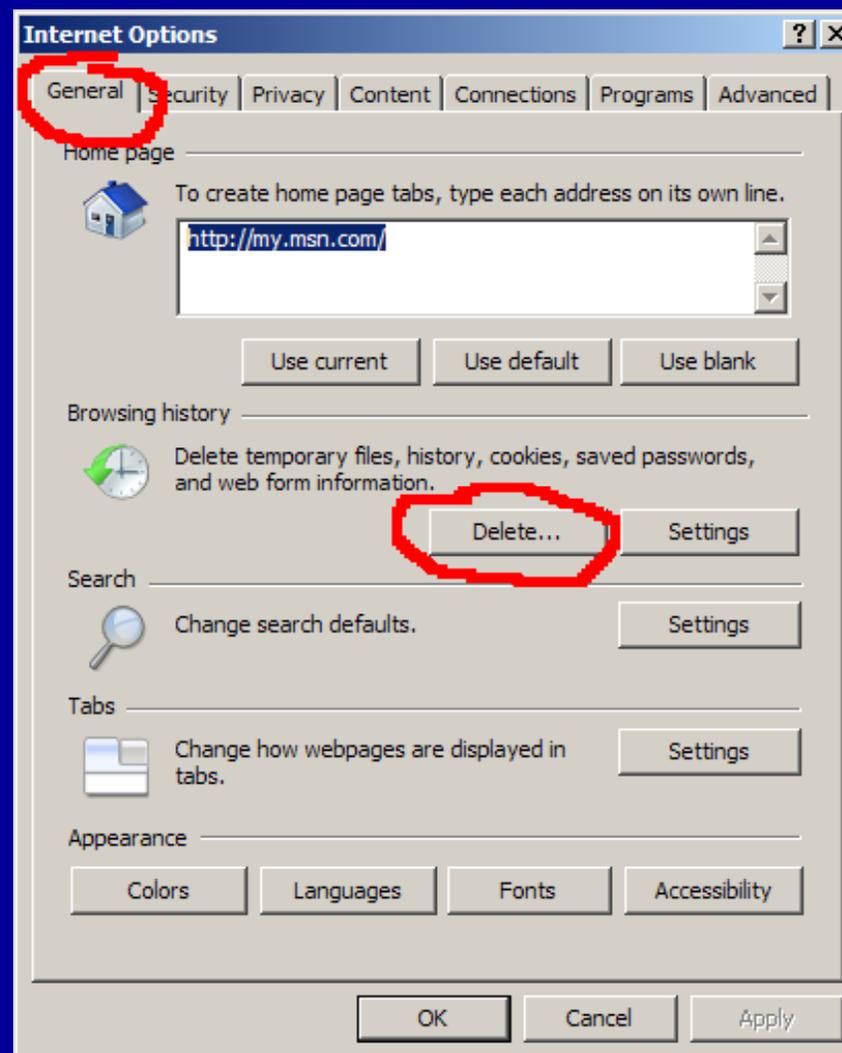


The screenshot shows a Windows Internet Explorer browser window. The address bar contains "www.ndcourts.gov/" and the search bar contains "bismarck sunrise sunset". The page title is "North Dakota Supreme Court" and the date is "Saturday, February 21, 2009". The main content area displays "Third Branch: This Week on the Hill" with a sub-headline "For Feb. 23-27, the weekly listing of legislative committee hearings that may be of interest to judges and lawyers has been posted." and a bullet point "61st Legislative Assembly". Below this is a section titled "Circuit decides N.D. case" with the text "The United States Court of Appeals for the Eighth Circuit has affirmed a sentence in a North".

The Tools menu is open, showing options such as "Delete Browsing History...", "Pop-up Blocker", "Phishing Filter", "Manage Add-ons", "Work Offline", "Windows Update", "Full Screen", "Menu Bar", "Toolbars", "Windows Messenger", "Diagnose Connection Problems...", "Sun Java Console", and "Internet Options". The "Tools" button in the toolbar and the "Internet Options" menu item are circled in red.

# Erasing Your Tracks

## ■ Microsoft Explorer



# Erasing Your Tracks

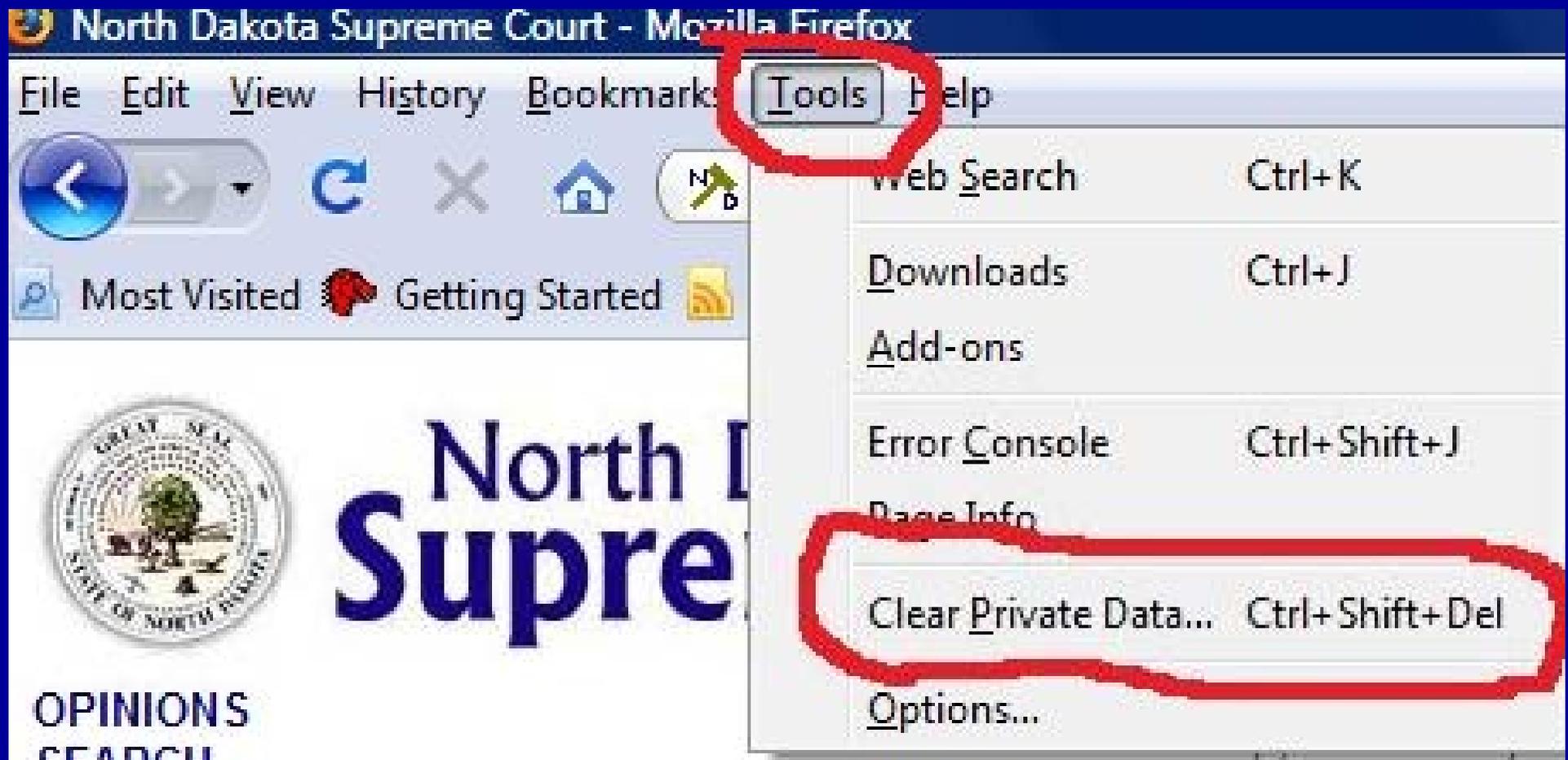
- Netscape procedure—before using:
  - Click “Tools”
  - Click “Options”
  - In “Security and Privacy” box
    - Click “Privacy”
    - Click checkbox “Clear My Tracks on Exit”
    - Expand other options and check “clear on exit”

# Erasing Your Tracks

- Netscape procedure—after 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



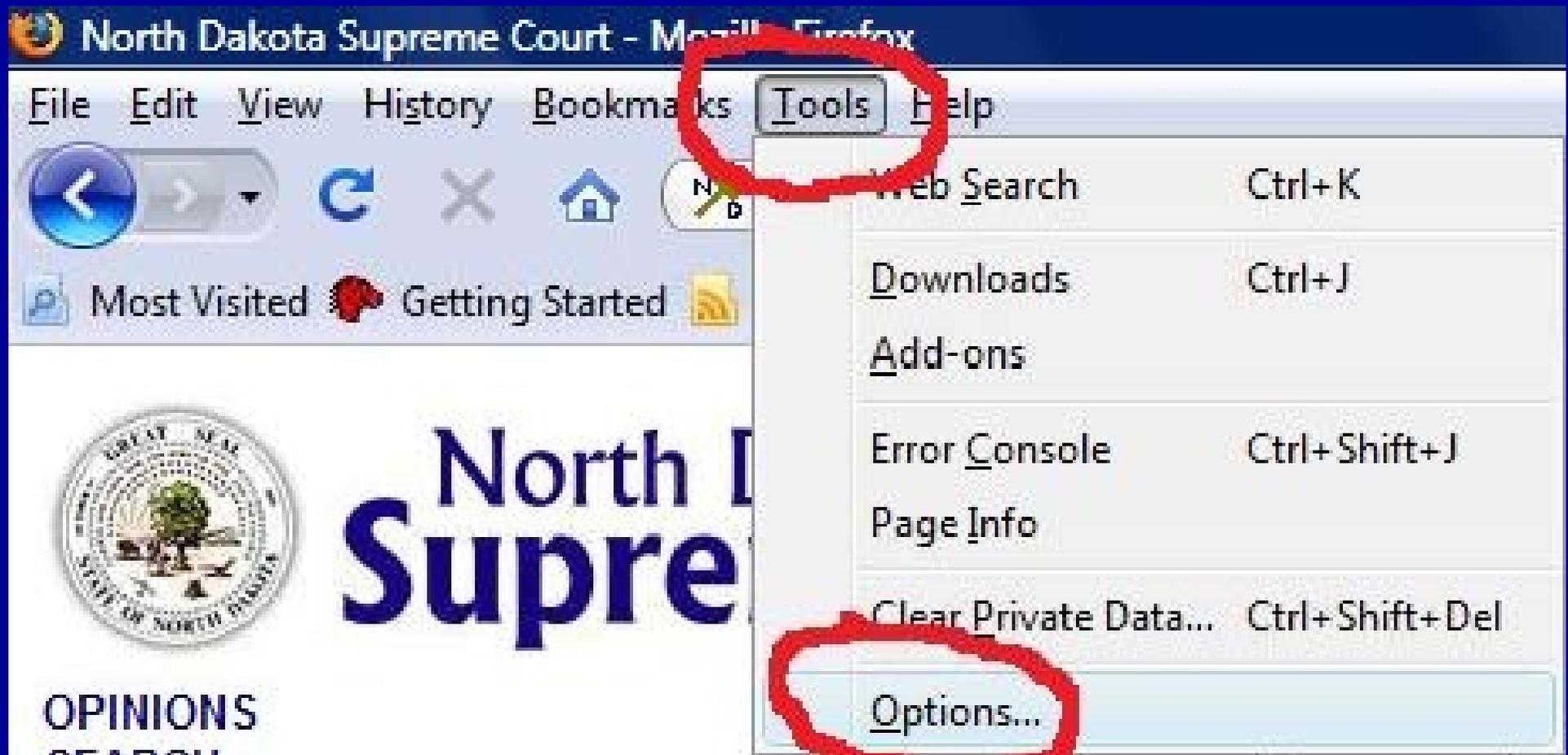
# Erasing Your Tracks

## ■ Mozilla Firefox browser



# Erasing Your Tracks

## ■ Mozilla Firefox browser



# Erasing Your Tracks

## ■ Mozilla Firefox browser

