



# PERFECTING THE CUSTOMER EXPERIENCE



# Legal and Policy Considerations for E-mail

An architectural (sort of )  
overview

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# The Right to Privacy

- Recent inventions and business methods call attention to the next step which must be taken for the protection of the person, and for securing to the individual . . . the right “to be left alone.” Instantaneous photographs and newspaper enterprise have invaded the sacred precincts of private and domestic life; and numerous mechanical devices threaten to make good the prediction that “what is whispered in the closet shall be proclaimed from the house-tops.”
  - The Right to Privacy, Samuel Warren & Louis D. Brandeis (4 Harv. L. Rev. 193 (1890))

# Our Approach to Privacy

- Privacy = appropriate use of information
- How do we determine what's appropriate:
  - Laws;
  - Policies, including Code of Conduct and those on records retention, legal holds and privacy policies;
  - Information security concerns; and
  - Common sense considerations.

# Objectives of Presentation

- Understand how e-mail flows
- Understand the foundation of the applicable legal framework
  - Not constitutional -- statutory
- Identify industry based laws
- Understand basic security concerns and laws applicable to them
- See how different laws apply based on steps in life-cycle

## Sample E-mail

**From:** "Holleman, Andy" Andy.Holleman@Qwest.com  
**To:** "drewholleman@yahoo.com" drewholleman@yahoo.com  
**Sent:** Mon, January 25, 2010 4:00:04 PM  
**Subject:** Header Test

This is a test e-mail to see what the headers look like.

This communication is the property of Qwest and may contain confidential or privileged information. Unauthorized use of this communication is strictly prohibited and may be unlawful. If you have received this communication in error, please immediately notify the sender by reply e-mail and destroy all copies of the communication and any attachments.

# Headers show its path

## In Outlook, open e-mail, go to: View / options

From Holleman, Andy Mon Jan 25 23:00:04 2010 X-Apparently-To: drewholleman@yahoo.com via 98.136.167.166; Mon, 25 Jan 2010 15:00:41 -0800 Return-Path: <andy.holleman@qwest.com> X-YMailISG: fJ3hK9MWLDS9hoot.EK9svPI5FvCiRG0xW6TSSwnAPTSSt0k.I 1MetFGtMBAz4fk8dpOubQooP0CHN32UPq6u07Wm43 5tk3YtZwaNIF29gpWb0WKIIEsooDKb6EPkcx7mtTc3P.eVn5x7wHFdY1rLullJVn0BkWrvEkr288MU6J7Ung48OVAtCQOL OqPmCsL8FedUIGs0.CShfRgf2g7Oezc9TAH2FofAPn71ueNHVioa.o149LVyf816Vgshwecl4WBoswww-- X-Originating-IP: [155.70.32.99] Authentication-Results: mta1055.mail.ac4.yahoo.com from=qwest.com; domainkeys=neutral (no sig); from=qwest.com; dkim=neutral (no sig)

Received: from 127.0.0.1 (EHLO sudnp799.qwest.com) (155.70.32.99) by mta1055.mail.ac4.yahoo.com with SMTP; Mon, 25 Jan 2010 15:00:40 -0800

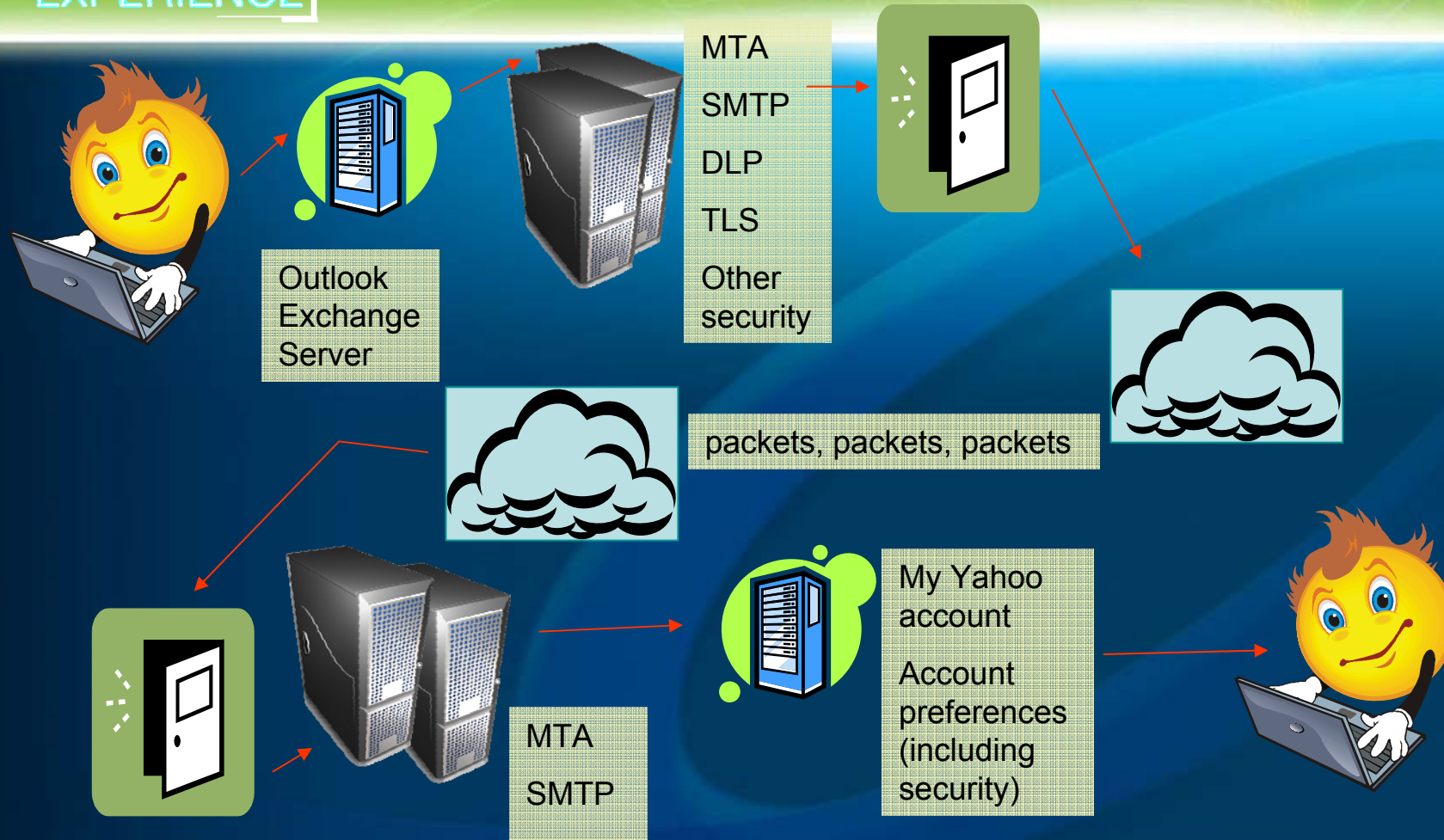
Received: from suomp61i.qintra.com (suomp61i.qintra.com [151.117.69.28]) by sudnp799.qwest.com (8.14.0/8.14.0) with ESMTTP id o0PN0e9w017693 for <drewholleman@yahoo.com>; Mon, 25 Jan 2010 16:00:40 -0700 (MST)

Received: from qtddenexhtm21.AD.QINTRA.COM (localhost [127.0.0.1]) by suomp61i.qintra.com (8.14.0/8.14.0) with ESMTTP id o0PN0AKA020869 for <drewholleman@yahoo.com>; Mon, 25 Jan 2010 17:00:34 -0600 (CST)

Received: from qtddenexmbm22.AD.QINTRA.COM ([151.119.91.224]) by qtddenexhtm21.AD.QINTRA.COM ([151.119.91.230]) with mapi; Mon, 25 Jan 2010 16:00:06 -0700 From: "Holleman, Andy" <Andy.Holleman@qwest.com> To: "drewholleman@yahoo.com" <drewholleman@yahoo.com> Date: Mon, 25 Jan 2010 16:00:04 -0700

Subject: Header Test Thread-Topic: Header Test Thread-Index: AcqeEiHQCILeVx+CTAasvoLbgo6rLw== Message-ID: <D5AF464FC9059946B21D555C88BC43120B69D2B73C@qtddenexmbm22.AD.QINTRA.COM> Accept-Language: en-US Content-Language: en-US X-MS-Has-Attach: X-MS-TNEF-Correlator: acceptlanguage: en-US Content-Type: multipart/alternative; boundary=" 000\_D5AF464FC9059946B21D555C88BC43120B69D2B73Cqtddenexmbm22A\_" MIME-Version: 1.0 Content-Length: 1821

# E-mail Life-cycle – Overview



## E-mail Stages

- There are at least five discrete stages at which an electronic mail message could be intercepted and its contents divulged to an unintended receiver:
  - at the terminal or in the electronic files of the sender,
  - while being communicated,
  - in the electronic mailbox of the receiver,
  - when printed into hardcopy,
  - and when retained in the files of the electronic mail company for administrative purposes.
    - 1985, Office of Technology Assessment, *Federal Government Information Technology: Electronic Surveillance and Civil Liberties*, cited in U.S. v. Councilman, 418 F.3d 67, 76 (1<sup>st</sup> Cir. 2005) (Councilman II)

## The 4<sup>th</sup> Amendment

- Offers strong privacy protections for our homes in the physical world
- Normally, it does not protect information disclosed to third parties
  - An e-mail travels through the hands (or servers) of many third parties before it reaches its destination
- Most ISPs are private actors, and it does not apply to a private actor
  - THE FUTURE OF INTERNET SURVEILLANCE LAW: A SYMPOSIUM TO DISCUSS INTERNET SURVEILLANCE, PRIVACY & THE USA PATRIOT ACT: SURVEILLANCE LAW: RESHAPING THE FRAMEWORK: A User's Guide to the Stored Communications Act, and a Legislator's Guide to Amending It, 72 Geo. Wash. L. Rev. 1208, 1209-1213, Orin S. Kerr (2004).

# Congressional Action

- Congress enacted the Electronic Communications Protection Act (ECPA) and the Stored Communications Act (SCA) (sometimes referred to as Title II of ECPA) to close the gap.
  - 18 U.S.C. 2510 – 2522 (ECPA / Wiretap) (interception)
  - 18 U.S.C. 2701 – 2711 (SCA) (divulgence / disclosure)

## Step 1



### Draft an e-mail and save but do not send

- Assumptions: Company provided machine and e-mail service

- The transmission is not yet subject to ECPA
- Whether I have a reasonable expectation of privacy likely depends on corporate policy
- Is this a corporate record?
- Could this be subject to legal hold?

## Code of Conduct

- . . . you agree that your use of these systems is primarily for business purposes and that there is no reasonable expectation of personal privacy in your use of the Company's systems . . .
- The Company has the right to access, inspect, search, monitor, take possession of, record and disclose all communications by you and information about your use of all and Company systems . . .

# Records Retention Considerations

- Draft is probably not a business record
- But it could be subject to legal hold

## Step 2



Hit "send"

- Now it is an electronic communication subject to the protections of 18 U.S.C. 2511, 2702 and 2703.
- Depending on its content, it could be subject to other industry specific laws such as the Telecommunications Act, GLB or HIPAA
- It is also subject to the security requirements of content specific laws (including those of MA and NV) as it makes its way into the public Internet.

# Statutory Framework

- ECPA and the SCA are criminal statutes.
- They are a labyrinth. Consider the following key factors:
  - Who holds it?
    - Public or private provider?
  - Content or records?
    - Content gets greater protection.
  - In transmission or in storage?
    - In transmission gets greater protection.
  - Who is the asking for or receiving the information?
    - Higher standards apply for the provision of any information to the government.

## Industry-specific Laws

- Telecommunications Act
  - Account information generally, carrier information, and CPNI
- HIPAA
- GLB
  
- Is the communication privileged?

## Other State Laws

- “Alicia Granstedt, a Las Vegas-based hair stylist who works for private clients and on movie sets, never worried about conducting most of her business through email.
  - *Ms. Granstedt regularly receives emails from customers containing payment details, such as credit-card numbers and bank-account transfers. Since she travels frequently, she often stores the emails on her iPhone.*
  - *But a Nevada law . . . requires all businesses there to encrypt personally-identifiable customer data, including names and credit-card numbers, that are transmitted electronically...”*
    - WSJ article by Ben Worthen, October 16, 2008

## Other State Laws (cont.)

- Massachusetts Law 201 CMR 17.00
  - Applies to those that own or license personal information about a resident of Massachusetts.
  - Applies to **Personal information**, which is a resident's first name and last name or first initial and last name in combination with any one or more of the following data elements that relate to such resident: (a) Social Security number; (b) driver's license number or state-issued identification card number; or (c) financial account number, or credit or debit card number . . .
  - The law establishes general governance standards and several specific obligations, including
    - Encryption of all transmitted records and files containing personal information that will travel across public networks, and encryption of all data containing personal information to be transmitted wirelessly.

## Step 3

### Traverses the open Internet

packets, packets, packets



- MTA
- SMTP
- DLP
- TLS
- Other security



MTA  
SMTP

- Interception and Electronic Communications Service Provider standards apply
- Security concerns

# E-mail Security Issues

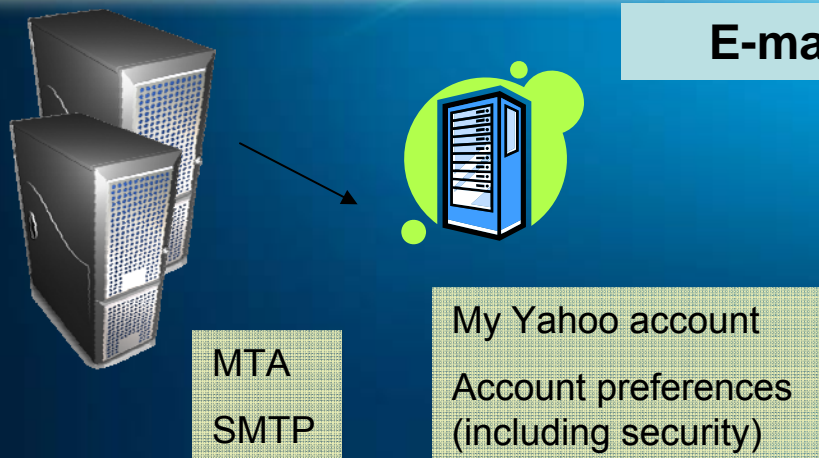
- Hacks to MTA and mail sites
  - Example: Google (see next slide)
- Malware on PCs causing exposure of user name and password
  - Enabling access to mail account
- Regional risks associated with monitoring

## Example: Google E-mail

- “Google e-mail accounts of at least two foreign journalists in Beijing have been compromised, a journalists’ advocacy group in China said on Monday, adding that hackers changed Gmail program settings so that all messages would be forwarded to unfamiliar addresses.
- . . . In many cases, it was unclear when the hackers had broken into the accounts. . . .
  - NY Times, “Hackers Said to Breach GMail Accounts in China,” January 18, 2010, by Edward Wong

## Step 4

### E-mail reaches Yahoo inbox



- Subject to standards applicable to an Electronic Communications Service in 2702 and 2703.
  - Those standards change after it has been there for 180 days
- Misdirection or misuse could still constitute an interception
  - See Councilman II (an e-mail may still be in transit and subject to interception, even while in temporary electronic storage)
- Subject to user's agreement with the user's ISP (see next slide)

# Privacy Policy Excerpts

- Yahoo!'s practice is not to use the content of messages stored in your Yahoo! Mail account for marketing purposes
- But compare . . .
  - Google's computers process the information in your messages for various purposes, including formatting and displaying the information to you, delivering advertisements and related links, preventing unsolicited bulk email (spam), backing up your messages, and other purposes relating to offering you Gmail.

## Step 5



### Access e-mail in inbox

- Keep copy in inbox
- Now ISP probably a Remote Computing Service
  - But see standard in Theofel v. Farey-Jones, 359 F. 3d 1066 (9<sup>th</sup> Cir. 2003), which says ISP is still an Electronic Communication Service as long as it holds an e-mail sent to a recipient, even after access.
  - Importance of RCS / ECS distinction. See Quon v. Arch Wireless, 529 F.3d 892 (9<sup>th</sup> Cir. 2008)(review on cert pending).
- Corporate access (for records retention or legal hold purposes) subject to my cooperation
  - Consider preservation notice in legal hold circumstances

# Computer Fraud and Abuse Act

- Prohibits unauthorized access to a computer with intent to defraud.
  - Note claims against Nebuad.

# Summary

- Who holds it?
  - Public or private provider?
- Content or records?
  - Content gets greater protection.
- In transmission or in storage?
  - In transmission gets greater protection.
- Who is the asking for or receiving the information?
  - Higher standards apply for the provision of any information to the government.

# ECPA / SCA Matrix

Traditional Understanding	Theofel v. Farey-Jones-	Voluntary Disclosure Allowed? Public Provider	Voluntary Disclosure Allowed? Non-Public Provider	Mechanisms to Compel Disclosure Public Provider	Mechanisms to Compel Disclosure Non-Public Provider
ECS: Unopened e-mail in storage 180 days or less	ECS: E-mail in storage 180 days or less	No, unless § 2702(b) exception applies [ § 2702 (a)(1)]	Yes [ § 2702(a)(1) ]	Search Warrant [ § 2703(a) ]	Search Warrant [ § 2703(a) ]
ECS: Unopened e-mail in storage more than 180 days	ECS: E-mail in storage more than 180 days	No, unless § 2702(b) exception applies [ § 2702 (a)(1)]	Yes [ § 2702(a)(1) ]	Subpoena with notice; 2703(d) order with notice; or search warrant [ § 2703(a,b) ]	Subpoena with notice; 2703(d) order with notice; or search warrant [ § 2703(a,b) ]
RCS: Opened e-mail, other content files being remotely stored or processed	RCS: Files not covered above being remotely stored or processed	No, unless § 2702(b) exception applies [ § 2702 (a)(2)]	Yes [ § 2702(a)(2) ]	Subpoena with notice; 2703(d) order with notice; or search warrant [ § 2703(b) ]	SCA doesn't apply [ § 2711(2) ]
Most non-content records	Most non-content records	No, unless § 2702(c) exception applies [ § 2702 (a)(3)]	Yes [ § 2702(a)(3) ]	2703(d) order or search warrant [ § 2703(c)(1) ]	2703(d) order or search warrant [ § 2703(c)(1) ]
Basic subscriber information, session logs, IP addresses	Basic subscriber information, session logs, IP addresses	No, unless § 2702(c) exception applies [ § 2702 (a)(3)]	Yes [ § 2702(a)(3) ]	Subpoena; 2703(d) order; or search warrant [ § 2703(c)(2) ]	Subpoena; 2703(d) order; or search warrant [ § 2703(c)(2) ]

Stored Communications Act (Title II of the Electronic Communications Privacy Act of 1986)

Taken from material presented by C.U. Law Professor Paul Ohm on December 4, 2009  
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# Questions???

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