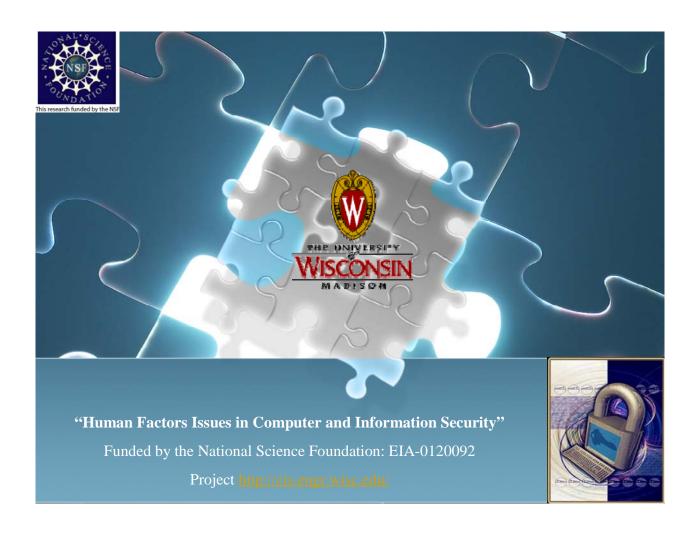
## **Computer and Information Security End User Questionnaire**



**VERSION APRIL 2008** 

#### END USERS QUESTIONNAIRE

Dear end user

The Center for Quality and Productivity Improvement at the University of Wisconsin-Madison is studying Computer and Information Security from a Human Factors Perspective.

Considering that many organizations and the people who work there are extremely dependent on information technology, computer and information security (CIS) has become a critical concern from a business viewpoint. Much research has been conducted on CIS in the past years. However, the attention has been primarily focused on technical problems and solutions. Recently, the role of human factors in CIS has been recognized.

In this study we collect data on non-malicious CIS deviations from the written (for example, an organization's CIS policy) and unwritten (best practices in CIS) rules by end users. In other words, we focus on deviations in which a bad outcome is not intended, but that may cause computer and information systems to become more vulnerable. That clearly distinguishes them from intentional violations that per definition have an intended bad outcome (e.g. hacking, phishing schemes). Examples of end users' deviations from the written and unwritten rules are: using weak passwords that are easy to remember, sharing passwords, and turning off firewalls.

In order to learn more about CIS deviations and make computer and information systems less vulnerable, we need your help. We are asking you to fill out this questionnaire. It will take at most 10 minutes of your time.

When completing the questionnaire, you can leave blank any questions that you do not want to answer. Remember that your responses are strictly confidential and will be closely guarded. This questionnaire has been designed to gather information about computers and information security, your use of passwords, your computer use at home, and your attitudes towards computer and information security. Please try to answer all the questions.

To answer the questions, check the appropriate box on the scale. For example:

	Yes	No	Do not know	Not applicable
			DK	NA
Do you have your own blog?	$\square_1$	$\square_2$	<b>A</b> 3	$\square_4$

If you do not know the answer to a question, or it is not applicable to your situation, please check the box **DK/NA** (Do not know/not applicable)

We appreciate the time you are taking to complete this questionnaire and hope that the information will help us create computer and information systems that are less vulnerable!

Thank you for your cooperation!

#### 1. Accessing the computer system and passwords

The following questions are about the passwords you use to access a computer, a computer system (e.g. your computer network or at work), a computer application (e.g. a Word processor, a spreadsheet or a database), a web service (e.g. Internet banking) or a website (e.g. Amazon.com). Normally you need a username and password to access the computer, computer application, etc.

1	How many passwords do you have <i>totally</i> to logon to different computers/access different applications/web services/web sites, at your work?	ра	SSWO	rds	
2	If you only have one password, do you use that same password to access multiple systems/applications?	Yes		No	
3	If you use different passwords to access multiple systems/applications, do you make a distinction between systems that need special protection (e.g. your office network) and systems for which you can use an easy to use and remember username/password combination such as Internet retailer websites (e.g. Amazon.com)?	Yes		No	
4	On an average, how often do you change your password(s)?	tim	es a	year	
5	When you change your password, is that primarily because of the company's policy or on your own initiative?				
	Company policy				
	Own initiative				
6	When you change your password, do you use:	Yes	No		
	A long password (more than 8 characters				
	A combination of upper and lower cases				
	Special characters (e.g. *,^, #)*				
7	When you change your password, do you use your old password as a basis (for example password2007 becomes password2008)?	Yes	No □	DK	NA
		Yes	No	DK	NA
8	Do you write your passwords down?				
9	Do you keep your username/passwords in an electronic file (e.g. Word document)?	Yes	No □	DK	NA
10	If you keep your password in an electronic file, do you secure the file(s) by	Yes	No	DK	NA
	password protecting or encrypting it?				
11	Do you use software to keep track of your passwords (e.g. Internet Explorer password manager, Firefox password manager, Password manager, Roboform etc)?	Yes	No	DK	NA
		Yes	No	DK	NΑ
12	Do you share your password(s) with other people?				
		Yes	No	DK	NA
13	Do you always log off when you step away from your computer?				
14	Do you use a password protected screensaver?	Yes	No	DK	NA
15	Do you use a screen lock? For example, do you use Windows Lock Workstation option, meaning that you have to login again when you come	Yes	No	DK	NA
	back?	Voc	□ No		 NIA
16	Do you turn off your computer when you are done working for the day?	Yes	No □	DK	NA
		1 1	1 1	1 1	1 1

#### 2. Security settings of the computer

The next set of questions is about the security settings of your computer, that is software (e.g. anti-virus software, firewalls etc.) that protects your computer from attacks (viruses, spyware, etc.)

1	Does your computer have an anti-virus program installed?		Yes	No □	DK	NA
2	Is the anti-virus program updated on a regular basis (newer versions of the program are installed, new definition files are downloaded, etc.)?		Yes	No □	DK	NA □
3	How often are the anti-virus definitions updated?	Every day	Every week	Every month	DK	NA
4	Do you have a firewall installed on your computer?		Yes	No	DK	NA
5	If you have a firewall installed on your computer, what kind of firewall is it?					
	Windows firewall					
	Personal firewall, such as ZoneAlarm, Norton, etc.					
	Do not know					
6	If you do <b>not</b> have a firewall installed on your computer, why not?					
	I do not know what a firewall is/what it does					
	I do not need to use a firewall because I always work from within a secure network (e.g. through a VPN connection)					
7	Did you ever try to change the security settings of the computer you work on (e.g. firewall, anti-virus software, remote access settings)?		Yes	No □	DK	NA
8	If yes, what did you change?		Yes	No	DK	NA
	Anti-virus p	rogram				
	Firewall	settings	Yes	No □	DK	NA
		Other				
9	Do you use anti-spyware tools (e.g. Max Spyware		Yes	No	DK	NA
	Detector, Stopzilla, Ad-Aware SE, etc.) on your computer?					
10	Do you allow "scripting" (e.g. Java script, Active-X, Flash,		Yes	No	DK	NA
	etc.) on your computer?					

### 3. System maintenance and downloading software

The next set of questions are about system maintenance, such as upgrading software, and downloading of software.

1	What kind of browser do you normally use to connect to the Internet?				
	Internet Explorer				
	Mozilla Firefox				
	Safari, Leopard (Apple Computers)				
	Opera				
	Other				
	Do not know				
2	Is the software on your computer (e.g. Windows, Internet Explorer, Microsoft Office, etc.) updated/upgraded on a regular basis?	Yes	No	DK	NA
3	Do you install security patches on a regular basis?	Yes	No	DK	NA
4	If you install security patches on a regular basis, how is this organized?				
	<ul> <li>My computer checks the Internet automatically to search for the newest updates/patches and installs them automatically</li> <li>My computer checks the Internet automatically to search for the</li> </ul>				
	newest updates/patches, notifies me and then I choose what to update and what not to install  On a regular basis, I visit the websites (e.g. Microsoft, Apple) on				
	the Internet and search for updates or patches and then choose which ones to install				
	I do not know				
5	Did you ever install software that you downloaded from the Internet for	Yes	No	DK	NA
	free (Freeware or Shareware)?				
6	Do you use peer-to-peer file sharing software/programs (such as BitTorrent, Direct Connect, eDonkey, eMule, Napster, Kazaa, etc.)?	Yes	No	DK	NA

#### 4. Electronic Mail or

The next questions are about Electronic mail or Email (e.g. Outlook, Outlook Express, AOL, Apple Mail etc.), web-based Email, calendar software (e.g. Hotmail, Yahoo mail, G-mail, Google Calendar, etc.) and Email attachments (a computer file which is sent along with an Email message).

1	Does your Email program have an Email spam filter (also known as "bulk Email" or "junk Email" filter)?				No □	DK	NA
					No	DK	ΝA
2	Do you open Emails if you do not know who the send	ler is?		Yes			
_				Yes	No	DK	NA
3	Do you open Email attachments if you do not know w	the sen	der is?				
1	Do you use enswitting when conding Email?			Yes	No	DK	NA
4	Do you use encryption when sending Email?						
5	5 Do you use web-based Email software such as Yahoo mail, Hotmail, Gmail, etc.?				No	DK	NA
J	bo you use web-based Email software such as Talloo	iliali, fioti	nan, Ginan, etc.:				
6	Do you use web-based calendar software such as Go	oale calend	ar?	Yes	No	DK	NA
U	Do you use web-based calendar software such as do	ogie calend	ai:				
7	If you use web-based Email or calendar software, do	you pay at	tention to the	Yes	No	DK	NA
,	security settings of the web-based software?						
5.	Help with computer problems						
	e following set of questions are about who you approad oblems with a computer application	ch for help	if you have comp	uter p	roble	ns or	
1	If you have a problem with your computer or a						
	computer application, who do you approach for help?		My boss				
	neip:		One of my coll	eaque	S		
			The help desk				
			The network/s	vstem	admi	nistra	tor
			A friend	,			
			Other (please	specify	<b>/</b> )		
2	If you have problems with a computer application,	Yes	No	DK		NA	
	is it easy for you to contact your network or system						
	administrator or the help desk?						
3	If you have problems with a computer application,			<b>D</b> 14			
	does your network or system administrator or the	Yes	No	DK		NA	
	help desk provide you with solutions that help you out?						
4	If you have a computer problem and your network	Yes	No	DK		NA	
	or system administrator asks you for your						•
	password, do you give it to him/her?	_	_	_		_	

#### 6. Remote access and working from home

The following set of questions are about remote access. Remote access means accessing your organization's computer network from a remote location. The remote location can be an airport, a hotel room, your home etc.

1	Do you work from homo?			Y	'es	No		
_	Do you work from home?							
2	If you work from home, do you w provided by your organization or computer?				Com	npany Laptop		
						sonal Compute	er	
					Both	1		
3	In general, how safe do you feel your home computer is	Very safe	Somewhat safe		very afe	Not at all safe	DK	NA
3	from online threats?							
	Do you use remete access (dial in	wirolo	ss system	Υ	'es	No	DK	NA
4	Do you use remote access (dial in cable, satellite) to access your or							
_	How do you access your organiza	tion's ne	twork from					
5	home?				•	hone modem		
						l cable connec	ction	
					wire	less system		
6	If you use a wireless network at h			Y	es	No	DK	NA
0	your wireless network connection enabled or access restriction)?	(e.g. ei	істурцоп					
	If you work from home, do you u	se a VPN	I (Virtual			N.	DIV	<b>.</b>
7	Private Network) to connect to you network?	ur orgar	nization's		es □	No □	DK □	NA
	network:							
8	Do other people (your spouse, far your computer at home?	mily, frie	ends, etc.) use		es □	No □	DK □	NA
	·			L		Ш		Ц
9	If you work from home, how do y information (computer files etc.) work? (Check all that apply)							
	work: (Check all that apply)			Y	es	No	DK	NA
		Lap	otop computer	[				
	I store the data on my n	ا مرموسم	USB-stick	[				
	I store the data on my pe		ackberry, etc.)	[				
	I use a remote access connectio		ess to the files on the network	[				
	I forward the information			[				
	Online file storage services (v	veb spac	e on a server)					
		Other	nlease specify					

#### **7**. Sharing your computer and social networking

Th	e next set of questions are about sharing your computer and information	with oth	ier peop	le.	
1	At your work place, do you let other people use your computer?	Yes	No	DK	NA □
2	Do you have your own website or web page?	Yes	No □	DK	NA □
3	Are you part of a social or professional networking site (e.g. Myspace, Facebook, LinkedIn etc)?	Yes	No	DK	NA □
4	Do you have your own blog?	Yes	No	DK	NA □
5	Does your website, webpage or blog contain personal information (Email-address, telephone number etc)?	Yes	No	DK	NA □
6	If you upload information (files etc.) to the Internet (your website, your webpage, your blog, your company's network, etc.), do you use a secure (encrypted) connection (for example Secure Shell software)?	Yes	No	DK	NA □
8.	Computer and Information Security training				
Th	e next questions are about your organization's Computer and Information	Securit	y (CIS)	policy	
1	Did you ever receive training on computer and information security?	Yes	No	DK	NA □
2	Did the training on computer and information security (CIS) help you better understand your organization's CIS policy?	Yes	No	DK	NA

Did the training give you a better idea of the importance of computer

During the training, were you explained how to create a good

3

4

and information security?

password?

Yes

Yes

No

No

DK

DK

NA

NA

#### 9. Computer and Information Security policy

The next questions are about your organization's Computer and Information Security (CIS) policy

1	Does your organization have a computer and information security policy?	Yes □	<b>No</b> □	<b>DK</b> □	NA
2	Do you know the contents of this policy?	Yes	No □	DK	NA □
3	Do you understand the computer security and information policy at your organization?	Yes	No □	DK	NA □
4	Did you ever deviate or work around the computer security policy? For example, you downloaded useful software without authorization from the system/network administrator; you did not change a password etc).	Yes	No	DK	NA □
5	To your knowledge, do your co-workers deviate/work around the computer security policy?	Yes	No □	DK	NA □
6	If you or your co-workers deviate or work around the computer security policy, and someone finds out about it, are there repercussions?	Yes	No	DK	NA

# 10. Reasons to work around or to deviate from the computer and information and security policy

If you sometimes use a short cut (for example share your password(s) with others or otherwise work around or deviate from the written (e.g. computer policy) or unwritten (e.g. best practices) rules, for example by downloading unauthorized software, or writing down your password(s), can you check all the reasons below that apply to you?

		Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1	Sometimes, when I am under a lot of time pressure, or have a high workload, I use a short cut to get the job done					
2	I would like to always conform to the rules, but sometimes the organization I work for does not allow me to do so because of costs or productivity issues					
3	Sometimes I am just lazy and can not be bothered to go through all the required steps					
4	Sometimes it is just more convenient to do the things the way I do					
5	Sometimes I do not fully realize that I can endanger the system by what I do					
6	Even if I take a short cut sometimes, I know what I am doing, so the risks are minimal					
7	The system I work with is so incredible complex that I have no other choice than to use a shortcut					
8	I would like to follow to the rules, but sometimes pressure from others forces me to work around the rules a little bit					

#### 11 Attitudes toward computer and information security

The next questions are about your attitudes and your feelings with regard to computer and information security.

		Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongl <sup>s</sup> Agree
1	I can protect my computer from harm (hackers, phishers etc.) if I take good care of computer security (change passwords on a regular basis, use firewalls, encryption etc.).					
2	It does make a difference if I pay special attention to computer security, such as installing a browser that is less vulnerable (e.g. Apple's Safari, Firefox) instead of using Internet Explorer)					
3	The information that I keep on my computer is not interesting enough for people to try and hack into my computer					
4	I never download software from the web for which I did not pay (free downloads), and which can not be downloaded from a secure site.					
5	It does not matter what I do; if people have bad intentions they will be able to hack into my computer and our network.					
6	Attention to computer security is needed, but people should not overreact.					
7	I do not like to use the Internet for financial transactions					
8	Computer security worries me.					
12	. Computer and Information Security Risks					
Th	e next set of questions are about Computer and Information	on Securit	y risks			
1	Have you ever had a virus on your computer?		Ye		DK	NA
2	Spyware and adware are software programs that quietly sit on your computer and can deliver pop-ups or other advertisements to you. Based on this description, do you think you have any spyware or adware on your computer right now?			es No	DK	NA □
3	A phishing scam means that someone or a website tries to get personal information from you, for example by accidently signing into a website or filling out a form placed on web site? Have you, or do you believe you have, ever fallen victim to a phishing scam?				DK	NA □
4	Do you think your identity or financial information was s	tolen onli	Ye		DK	NA
	, , , , , , , , , , , , , , , , , , , ,			1 🗆		

#### 13. PERSONAL CHARACTERISTICS

What is your gender?	Male	Female
How old are you?		years
How much computer experience do you have?		years
What kind of computer user are you?		Novice user (You just started using computers)
you.		<b>Average user</b> (You use word processors, spreadsheets, Email, surf the Web, etc.)
		Advanced user (You can install software, setup configurations, etc.)
		<b>Expert user</b> (You can setup operating systems, know some computer programming languages, etc.)
What is the highest level of education you have completed?		
		Less than high school
		High school/GED
		Some college
		2-year college degree (Associate)
		4-year college degree (Bachelor)
		Master's degree (MA, MS)
		Professional degree (MD, JD)
		Doctoral degree (PhD)
Do you shop online	Yes	No
(e.g. Amazon.com)?		
Do you pay online (e.g. Internet banking)?	Yes	No
(c.y. Internet pariking):		