

Information Security Awareness Guidelines for Parents

Internet has become a necessary tool for the Family. Home computers or Mobiles are often shared with every member of the family, including children and teenagers. The Internet can connect you and your family to all types of resources. Using computer with internet, you and your family can read the latest news, look up for information, do online shopping, do online booking of household items, listen to music, play games, buy things, or e-mail friends. The possibilities for learning and exploring on the Internet are endless. However, not all information and resources are safe and reliable.

When you and your family surf the Web it's important to keep the following in mind:

- Online information is usually not private.
- People online are not always who they say they are.
- Anyone can put information online.
- You can't trust everything you read online.
- You and your family may unexpectedly and unintentionally find material on the Web that is offensive, pornographic (including child pornography), obscene, violent, or racist.

Step 1 : Secure your home Wi-Fi network.

Your home may be connected with Wi-Fi now and it allows your family to access the Internet from all over your house, which makes it harder for you to control the Internet activity and sharing information. If it's not secured properly, intruders might use your bandwidth, or compromise your Internet security by infecting your devices with malware. Further they may use your devices or systems, as bots for sending the attacks from your systems to other's systems or infrastructure.

- Change the default admin password with a secured one.
- Make sure your Wi-Fi device is highly secured
- Make use a strong password for accessing your router.
- Enable wireless encryption to prevent strangers from "seeing" your network and restrict access to it.

- Allow only specific devices to access your wireless network. Every device that is able to communicate with a network is assigned a unique Media Access Control (MAC) address, so use them.
- Use filtering options to avoid unnecessary websites with inappropriate content.

Step 2 : Consider Common Place for Computer to Children and Family

Placing the family computer at common room where family members gather is one of most important thing in a home for children and aged. You can help, monitor them so that they always safe on Internet. It also helps you to control the no. of hours of usage of computer by your children and useful for aged to continued learning with latest technologies through Internet.

Step 3 : Set Family Rules for Accessing Internet

One way to help family members is to frame Do's and Don'ts rules for accessing Internet. It is to set clear rules, standards for using computers and other electronic devices like smart phones and tablet computers. You may consider:

- Telling your family members like children to ask for your permission before they access the Internet.
- Setting time limits for computers and other devices, per day or per week, and what time of day is OK.
- Limiting your child to social networking sites that you approve, if you decide to allow them to use these kinds of sites.
- Joining social networking sites that your child uses, so you can monitor what they share.

Remind Family Members that people met online may be strangers

- No matter how often you chat with online "friends," no matter how long you've been chatting, and no matter how well you think you know them, people you meet online are strangers.
- It is easy to lie and pretend you are someone else when you are online. Children especially need to know that a new "friend" may really be a 40-year-old man rather than someone their own age. So please remind your family members that people met online may be strangers

Step 4 : Understand the need and set boundaries for online safety

As different family members may require different things to access Computer and Internet, together, agree Upon Family Rules in accessing Computer and Internet, Decide exactly what is okay and what is not okay with regards to

- Access of various web sites that appropriate to visit,
- Using chat rooms and forums which can be monitored

- Creating Usernames that never reveal true identity or that provocative
- Create Strong, Unique and Easy to remember Passwords for online account
- Pledge to not to share or post any sensitive information like phone numbers, names of family members that reveals family members identity
- Promise your family members not to post inappropriate photos or ones that may reveal your identity (for example: city or school names on shirts)
- Without informing family, never meet face to face meetings with strangers who met online
- Promise for not responding e-mails and attachments from strangers
- Any irritated activity such as cyber stalking, bullying etc and strange behavior computer and applications, promise to inform and discuss with family members

Follow Privacy Rules

Every time you (or a family member) want to join a new network, read the privacy policy carefully so that you know how/if its creators intend to use your information in any way, and what measures they take to prevent internet security dangers such as phishing and identity theft.

Step 5 : Sign for Online pledge among family members for appropriate online behavior

PLEDGE

As the Computer and Internet is a privilege for acquiring knowledge, surfing the things to know how, work, play, chat, and connect which I do not want to lose and for my safety and my family safety, we have agreed on online safety and behavior

- I will follow all of the safety and security rules of my computer and Internet access
- I will not reveal my identity including my phone number, my address, or my passwords with anybody
- I will never meet in person with people I met online. In case if required I only meet along with my family members
- If I find myself in an situation where I am uncomfortable, unsafe or abnormal behavior of any device, I promise to let my family members (my parent/guardian/teacher) know so that they can assist me
- I commit to this pledge and help in my safety, my family safety and also to my country safety to enable cyber safe India.
- As your parent/guardian/teacher, I promise to make myself available to you when you ask for assistance and will help you resolve any problems that may arise in any way that I can

Step 6 : Secure Your Computer

- Step 1 is to check if you have the latest security updates and patches available for your Windows, Linux, MAC and any other operating system, which you are using.
- Step 2 After you have installed your security updates for your operating system, make sure you have created a Restore Point for your installation.
- You can create the Restore Point as soon as your Operating System installation is ready and name it clean installation and then you can continue installing drivers and applications.

Step 7 : Keep your software up to date

- Make sure you have security software that protects your computer against viruses, hackers, and spyware.
- The software should be updated frequently, as new threats are emerging daily. Ideally, security that updates automatically

Step 8 : Install Antivirus, Desktop Firewall solutions against malware and unauthorized access

- Install Antivirus, Desktop Firewall solutions against malware and unauthorized access popular vendor as it is very important to have a reliable security solution on your computer system, which should include real-time scanning, automatic update and also firewall functionality, which can control unauthorized activity
- You may use some security software to protect your computer and your data and assure that the security software having minimum three components anti-virus, anti-spyware, and a firewall.

Step 9 : Back up your system

- You updated the operating system and your system applications and you have installed additional security products for your system safety.
- To make sure your data stays safe, you should be using a twofold strategy, which should include combining an external hard drive usage with an online backup service.
- We need to emphasize the importance of having a back-up solution, which provides stability so that you won't have any problems and allows you to synchronize your files with the online backup servers and provides some sort of security, such as encryption capabilities.

Step 10 : Use separate standard user accounts for family members

- Modern Operating Systems grants a certain level of rights and privileges depending on what kind of user account you have. You may have a standard user account or an administrator user account.
- It is recommended to use standard accounts for your family members to access computer to prevent users from making changes that affect everyone who uses the computer, such as deleting important files necessary for the system.
- In case you want to install an application or make security changes, Operating System will ask you to provide the credentials for an administrator or root account
- Using a standard account you make sure that a piece of malware which infects a limited-user account won't do much damage as one infecting a root or an administrator account. It also helps you to monitor the activity of users and control the software access to family members.

Step 11 : Create strong and easy remember passwords for your accounts.

To create passwords that are strong unique and easy to remember

- Start by using at least 8 characters minimum
- Use a combination of letters, numbers, and symbols (all variety of keys in a key board including Capital and Small letters).
- Passwords should be changed periodically to reduce the likelihood of a particular password being compromised over time.

Techniques for easy and strong passwords :

- For easy to remember, Use a Passphrase: "I love my child who always invites me with her great smile" - llmcwaimwhgs" (key : all first letters of words in passphrase)
- Change small letters to Capital letters of even position letters - lLmCwAiMwHgS (key becoming stronger password)
- Now change wherever i=!, g=9, s=\$, (personal keys you have to remembers for all your password) so that your password becomes more stronger than before. ?llmCwA!MwH9\$
- For making unique passwords, create as many as pass phrases and words for different passwords to different accounts. For example
 - shopping - \$h0pp!n9 (S =\$, i=!, g=9, o=0)
 - banking - bank!n99 (one more 9 is added as "banking" is with 7 letters)
 - Social Network - \$0c!alNetw0rK

- Windows -w!nD0W\$9
- GNU/Linux - 9NuL!NuX
- Do not share your personal keys and type of passphrases to any body
- Also remember that do not share usernames too with strangers as even they knowing passwords without user IDs are useless.
- Create your IDs which cannot reveal your identity
 - for example your name is Mr Ch A S Murty, The user ID **chasmurty** is always gives identity of him. Instead of chasmurty, **murch9** user ID may not reveal the same.

Step 12 : Secure your web browser before accessing Internet

- Always choose a latest or up to date version of browsers
- Always consider the right settings for security in browser settings
- Always Block pop-ups and allow only for trusted web sites depending on requirement or temporarily
- Choose a private browsing session about a web site, which you are not sure about.

Step 13 : Be careful online and don't click suspicious links

Step 14 : Ensure safe browsing for everyone, even for grandparents!

Step 15 : Download and install software from trusted sources only.

Free games, music, movies etc. are available for download all over the Internet. They are also very tempting and may attracting for children and other family members. But some of them contain spyware and other types of malware that can compromise your whole family's Internet security

Look for <https://> in the URLs of the websites you make online transactions from.

"S" in "https" stands for "secure" and should appear in every bank or online shop address.

Special Awareness for Female Parents

In cyber world women are subjected to harassment via email, morphing, cyber defamation, Social Networking, hacking, cyber-stalking, cyber pornography, cyber flirting and cyber bullying.

Some awareness best practices and Tips can help women to be safe from these cyber-attacks and protect them and their families.

As part of this project, Information Security Education and Awareness, we are trying to spread this awareness to women and help them to follow the best practices in using Internet, Smart phones and various other new cyber technologies through which attacks are most likely to happen.

1. Do you have email account?
2. Do you have social networking account?
3. Do you use smart phone?
4. Do you have smart washing machine or smart refrigerator?
5. Do you buy groceries online?
6. Do you buy items online?
7. Do you use WhatsApp, Instagram, viber ?

If answer to any of the above questions is yes from you, then please proceed reading the following articles. They are just for you.

The following are few simple and quick tips for Women in the cyber world

- Beware of fake profiles
- Maintain your privacy online
- Check your account settings regularly
- Don't let others peep into your accounts
- Avoid participating in chat rooms, they are not for us.
- Don't be happy if someone praises you online
- Do not get motivated for likes on your pictures and upload more

THANK YOU
