National Computer Board

Mauritian Computer Emergency Response Team

Enhancing Cyber Security in Mauritius

Instant Messaging and Chat Rooms – Play It Safe!

CERT-MU

National Computer Board
Mauritius

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1.0 Introduction

1.1 Purpose and Scope

The purpose of this document is to give details on the impact of chat and instant messaging on youngsters, and provides safety measures for both parents and kids.

1.2 Audience

This document, while generic in nature, provides the background information in order to understand the risks of online chatting and instant messaging and the precautions to take in so doing. The intended audience for this guideline includes all individuals that make use of chat rooms and instant messaging and especially targets young people as they are the ones who make widespread use of these technologies.

1.3 Document Structure

This document is organised into the following sections:

Section 1 gives an outline of the document's content, the targeted audience and the document's structure.

Section 2 presents a background on the evolution of the Internet, chat and instant messaging.

Section 3 explains what instant messaging is and the necessary precautions to take with it.

Section 4 discusses what chat is and outlines the safety measures that users need to consider while chatting online.

Section 5 concludes the document.

Section 6 comprises a list of references that have been used in this document.

2.0 Background

The internet is transforming the way we live. Particularly for children, it offers a lot of opportunities to communicate and to learn. It is fun; it is a great educational tool and it is an enabling facilitator. Young people have adopted new technologies passionately, especially the interactive services including games, chat, messaging, social networking sites and user generated content sites and made them their own. However, many parents still lack confidence in the cyber space, and their use of these technologies differs from their children and young people. They often feel less technology literate than their children and unable to monitor their activities or to offer advice and support and are unsure how to teach their children about risk management skills. These parental anxieties are often intensified through the media's interpretation of technology-related stories that link anti-social criminal behaviours with the use of technology amongst children and young people.

However, along with the vast number of benefits that the Internet offers there are potential risks for children, to reveal too many personal details about themselves, accidental exposure of children to inappropriate material, for bullying or harassment and, most seriously, for paedophiles to make approaches, for example, via instant messaging or in chat rooms, with sexual abuse intention towards children.

3.0 Instant Messaging

3.1 What is Instant Messaging (IM)?

Figure 1 An example of Instant Messaging

IM is typically a one-to-one communication between two users in real-time but some IM services may allow users to invite other users to join their conversation and this may be similar to chat to the users involved. However, the main difference from chat is that IM is a user-controlled environment and the user who initiates a conversation and/or opens up the call controls who can participate.

Basically, the technology provides an easy way of sending short written messages to one or a few friends online in real-time but IM can offer a range of communication tools, including: text-based chat, voice chat via voice over internet protocol (VoIP), webcams, and file and picture exchange. IM is a complex technology and can be accessed over a number of different platforms including: software clients, web-based systems, peer-to-peer, mobile phones and hand-held devices such as personal digital assistants.

There are many different IM products on the market, which are often freely downloadable from internet service providers' websites, or pre-installed on computers, games and mobile devices or accessible via services such as social networks. Many social networking services

have an IM type function, often called 'chat,' built in which enables the user to chat with their friends on the service. Although it is often confusingly called chat, it is more like IM as users chat one-to-one with individuals from their friends list. Examples of IMs are msn messenger, yahoo messenger and google talk.

IM can be a very private form of communication between known friends where the user builds up a list of contacts and is alerted when they are online. However, IM users can also access public address lists to find and make new contacts online.

3.2 Registration

When obtaining IM products, service providers require users to register and provide a certain amount of personal information, for example, email address, personal websites, age, gender and location etc. This information may be transferred automatically to a 'member directory' or 'public profile,' which can be visible to other users and is sometimes shared with other services. When registering for some IM services, it allows you to import contacts from other sources e.g. email address books and social networking friend lists.

3.3 Public profile

A profile is a page that contains information about the user, and can provide a range of fields for such information as real name, location, age, e-mail address, mobile phone number, personal website addresses, home address, interests and images/pictures. Other users can access this information and use it to contact people with similar interests.

Although IM can be used as a private tool, information made public through IM can be used by anyone who sees it. People may be able to send messages to a user having found their profile in a profile search. However, the user may still have the option of either receiving such messages from unknown users or blocking them. Users can change or add to the personal information in their profile.

These profiles can operate in a similar way to social networking profiles, and privacy controls can allow individuals to keep their information private, share it with friends or make it public. Permissions can be set on profile information, making control very flexible.

3.4 Child safety concerns

3.4.1 Content

Children and young people can be put at risk through viewing and sharing inappropriate content via IM, particularly through webcams and the exchange of inappropriate links.

IM can also be used to exchange files or images on a peer-to-peer basis. This could include inappropriate and illegal content, which can be sent directly through file exchange or via unsolicited email (SPAM). Viruses and malware can be sent and have been used to corrupt and/or take control of users' computers, gaining access to all their files and potentially their webcams.

Information should be available about how to keep safe in an online public environment for children, young people and parents, and in a style that is accessible to them. The messages should emphasise the importance of behaving responsibly online and what this means, including risks of communicating with strangers and/ or exchanging personal information such as name, address, school information and posting pictures.

3.4.2 Contact

There are some concerns about IM, for example telephone calls, from the private and unmoderated nature of the communication. Children have been fast to use IM and it has become part of their everyday lives to keep in contact with their friends at school or with friends they have made online. Children and young people have used the technology in positive and great ways but they too have realised its potential to harass and bully other young people, especially with the accessibility of mobile phones.

Sexual predators have also recognised the power of IM to:
- operate in an environment of relative anonymity,
- move conversations from the public arena of chat rooms to a one-to-one private communication via IM,
- maintain contact with a child on their contact list, as they can always know when a child is online, and
- groom children with a view to isolating and manipulating them, developing emotional attachment and creating dependency in them, and meeting them in the real world.

A true story:

I thought my friend's buddy was my buddy...

"A friend of mine introduced me to this guy online – he was called Jo. After being in contact with him for a couple of months on IM, he started hassling me and pressurising me to meet up offline. From our chats I thought I liked him but I was a bit nervous about meeting up with him. In fact, it turned out that my friend, the one who introduced me to Jo, didn't really know him at all. They only met online. I then decided to block Jo and remove him from my buddy list - but I was a bit nervous about what he would do as I had told him my school name and where I lived.

I still did receive messages from Jo – he just changed his user name to get round my block, but I blocked those messages and then changed my Messenger address so Jo could not contact me. I was scared at some points, particularly when I thought he would try and find me, so I told my parents about what had happened. They were just glad I had told them!"

(14 year old boy)

3.4.3 Conduct

The way children behave when using IM can put them at risk. IM allows users to share files which could include images of themselves in response to requests/pressure from other users. IM can offer easy access to and from other products, such as chat rooms, and can also be embedded in other products. Users can be just one click from the more private world of IM to the very public world of chat and vice versa. It is possible that some children may not appreciate the change in their environment. In some chat systems, the child's username for IM will be carried over to become the child's username in chat rooms, which then may make the user contactable via IM by someone who has seen them in a chat room. Parents themselves may not realise the integrated nature of IM and need to know about the potential risks of chat rooms, and that access to chat rooms can be easy.

3.5 Safety guidelines for instant messaging

3.5.1 Protect your kids' privacy during the registration process

When your kids register for instant messaging software, sit with them and make sure that their authorisation is required before anyone adds them to an IM list. Also, discourage them from filling out the "personal profile" that some programs ask users for - this information is made available to other users, so young people should never use this option.

3.5.2 Help your kids create their own user list

Know who is on your kids' IM lists, and what lists their names are on. Kids should only approve people for their IM lists if they know them in the "real world." Check your child's list regularly to make sure they have not added strangers.

3.5.3 Make sure the IM software they use doesn't offer access to chat rooms

Many IM programs offer access to chat rooms where users can talk to strangers. Some programs offer a link to chat rooms right on the opening screen - even if users opted out of the chat option when they registered. To avoid this problem, check your IM program carefully to make sure you can block access to chat rooms; and make sure your kids know that they are off limits.

3.5.4 Teach kids never to share their IM user names and passwords with others, online or in the non-virtual world

Kids often share their IM passwords with friends, which can easily led to account misuse. Remind your kids to choose passwords that cannot easily be guessed by others. Random combinations of letters, numbers and special characters offer the best protection against password theft.

3.5.5 Report pornographic junk mail to the instant messaging service provider

Even if your child's IM program have been configured to accept only messages from people on the contact list, she or he may still receive "spam", or junk e-mail - even pornographic spam. Use the "Ignore" function to block that sender in future, and report the spam to the service provider. As this is a frequent problem with some IM programs it is not recommended that young children use instant messaging.

3.5.6 Disable any file-sharing options

Most IM programs offer a file sharing option that allows users to download files to your computer's hard drive. However, serious viruses can be sent to your computer this way. If your child wants to be able to receive files from friends, make sure that the file sharing settings are configured so that you have to give your permission before a file can be downloaded to your computer.

4.0 Chat

Chatting online is popular with children and young users. However, engaging in online chat can leave young users open to a range of risks. The most 'headline grabbing risk' is the possibility of children being approached online by others with the aim of developing a sexual relationship with them in the 'real world' (contact). Online chat services also open children to other risks including exposure to inappropriate and hurtful conversations (content), being sent indecent or obscene images and being asked to send indecent images of themselves and/or their friends or being encouraged to self harm (conduct).
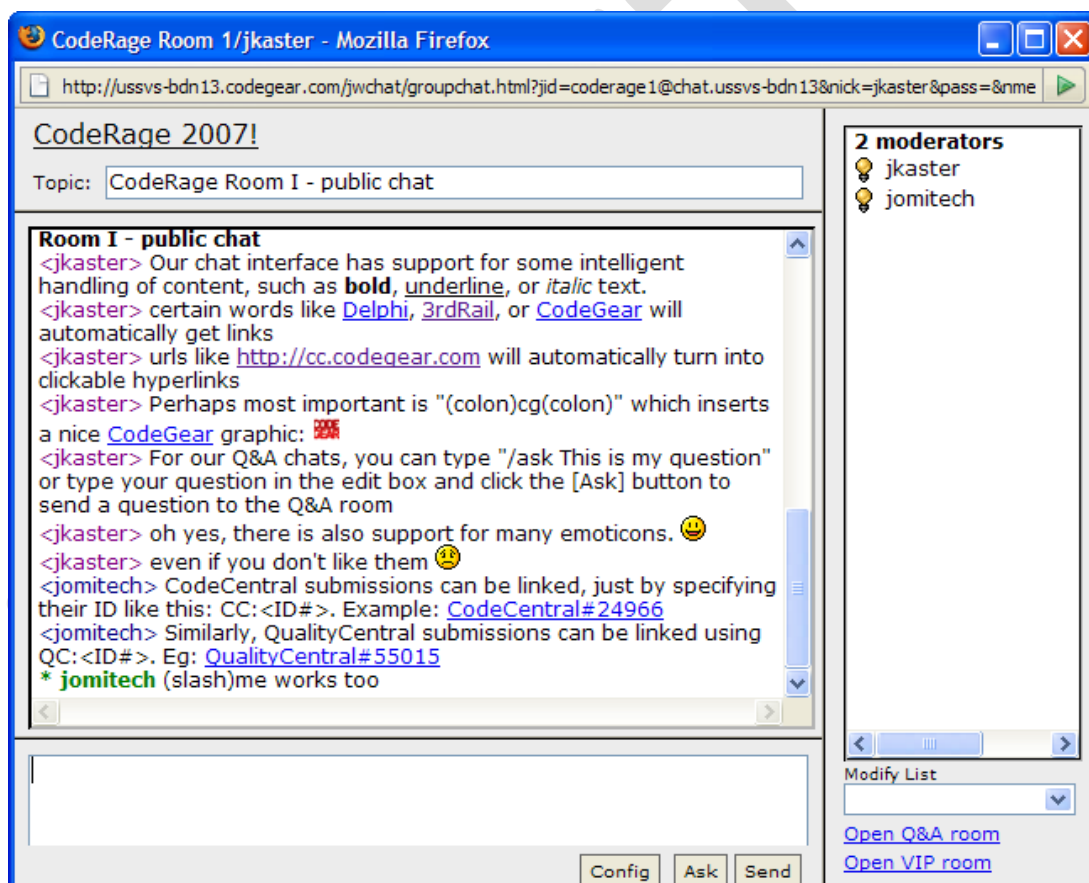
4.1 What is chat?

Figure 2 An example of a chat room

Chat typically starts in a public 'room' but can go private if the user chooses; the chat environment (in terms of who is chatting and what they can/can't do) is controlled by a provider and/or their moderator(s).

Chat is typically a real-time public discussion forum operated by a service provider and open to any user (registration and/or a profile may be required). Typically in chat rooms there are

many users chatting together in real-time and although they may chat regularly online, they generally do not know each other offline. Users may have the option of moving to a private chat room to talk with one or more members of the public form. Where private chat is a one-to-one discussion, it may look like instant messaging (IM) to the user.

As chat software has developed, individuals are not only able to send text messages to chat rooms but, are also able to communicate in real-time through voice chat, often using headsets, and be seen by other chat room members, through web cams.

Some chat services offer the user the ability to create a profile. A profile is a page that contains information about the user, and can provide a range of fields for such information as real name, location, age, and e-mail address, mobile phone number, personal website addresses, home address, interests and pictures/images. Other users can access this information and use it to contact and connect with people with similar interests.

Chat services are also available on mobile phones and the mobile operators have signed up to a code of practice to help parents control the type of content accessible to children. All commercial chat rooms must be placed behind access controls, where users verify they are over eighteen, unless they are moderated chat rooms. Additionally filters are made available for the wider internet on mobile phones.

Video games are also commonly played online and this online access provides shared playing places and allows users to chat together in real time. Multiplayer modes also allow users to chat and have a variety of interface game functions including chat and voice communications. Furthermore, there is a great deal of convergence with social networking services and service providers should refer to the good practice advice for the providers of social networking and other interactive services.

There is a huge selection of chat services, provided by companies running large global platforms, or individuals. Some are dedicated to particular interests, hobbies, news events, gossiping or simply to making new friends. Chat rooms run across a number of online and computer networks, such as:

- Internet Relay Chat (IRC) is described as the 'Net's equivalent of CB radio.' IRC is not owned or run by any single organisation,

- web based chat on dedicated chat websites,

- chat can be offered by online publishers, including individuals e.g. bloggers, so that users can interact with each other or the editors,

- chat can be part of interactive online gaming environments and chat services are also accessible via internet-enabled devices including mobile phones and also on gaming devices,

- social networking sites, both as functions of those sites and as downloadable third party applications, and

- in online virtual worlds such as "Second Life".

Chat is also used in the commercial world by companies as a means of communicating with their customers in real time to answer quick questions (e.g. in a support service context) or to offer advice (e.g. ask an online seller about a product).

Chat comes in a variety of different forms. Often, when joining a chat service or room an individual must select an onscreen name, nickname or avatar, and all members of a chat room are usually listed down one side of the screen. As well as chatting in a specific room, individuals can request and initiate private conversations with other members of a chat room, which can appear similar to instant messaging. There are often facilities for individuals to break out into a private chat room and invite particular individuals to that chat room.

A number of chat services and programmes provide a range of tools for users, such as 'ignore' buttons if they are feeling harassed by a particular individual, or word filters which identify certain coarse languages and prevent them being displayed on a screen. Responsible chat providers offer reporting facilities so complaints can be made to the service provider about another chat user's behaviour if it is offensive or harassing. It is good practice to provide community guidelines setting out acceptable conduct, as well as links to resources offering advice and help about internet safety.

4.2 Benefits of chat

Chatting online is a hugely popular activity for teenagers, and there are undoubted benefits in being able to communicate directly with people from around the world. Instant and real-time access to people of all ages and backgrounds enables the discussion of common interests, broadening horizons and increasing tolerance between both individuals and communities. All

users, children and adults alike, can enjoy the opportunity to interact, regardless of ability, disability or discrimination which may affect them in the 'real' world.

4.3 Child Safety Concerns

4.3.1 Content

Children and young people can be exposed to risks through viewing and sharing inappropriate content via chat services, particularly through webcam chat services and the exchange of inappropriate files or links. Children may also be exposed to unsuitable language and may put themselves at risk by sharing too much personal information such as real name, address and phone number. Specific concerns are that:

- chat services can be misused by individuals placing fake identities containing links to other sites, potentially exposing the user to porn and viruses,
- other users may make inappropriate material available by file transfer or live webcam images, and
- chat services can also be used to distribute spam messages.

A true story:

"My friend was using chatrooms, mostly teenage chatrooms, some regularly and she chatted with some of the friends she found there using messenger. Someone in a group of teenagers she was chatting with asked her to check an attachment for him with her virus checker.
He sent her a file which went into her start-up folder (and was thus very hard to remove; it had to be deleted using DOS). This program enabled him to see when she was online and to control her computer. He was able to control her mouse and her keyboard. It seemed like something out of the X-files.

She didn't know what to do, and told her Mum. They managed to find the problem and with the help of their internet provider deleted the programme from her hard drive and stopped him."
(14 year-old girl)

4.3.2 Contact

Areas of the internet frequented by young people are often targeted by adults or adolescents seeking sexual contact with children.

- The real-time nature of chat services offers particular opportunities for direct and immediate contact, with the added facility to persuade a child to move to a private conversation.

- Chat can offer a predator or bully seemingly anonymous direct contact at a safe distance allowing contact to be made while the child is using the internet in the secure surroundings of their own home, even their own bedroom. This can give the opportunity for "grooming", the development of a trusting relationship by a paedophile with the intention of committing contact abuse at some point, and the potential for bullying to take place at any time, intruding into spaces previously regarded as safe user profiles and directories can allow a would-be bully or abuser access to personal information they may use to the detriment of the user as well as an opportunity to make initial contact; files or links accessed from messages in chat rooms may carry viruses, or other harmful content.

4.3.3 Conduct

Risks to children can arise from their conduct - where the child is the actor and thereby the agent of risk. This can include their engagement with commercial risk such as illegal downloading, hacking, gambling, or through their initiating or engagement with bullying/ harassing behaviour and through the creating or uploading of inappropriate content including personal information.

4.4 Safety Guidelines for Chat

1. Remember that what you say in a chat room or instant messaging session is live - you cannot take it back or delete it later.

2. Do not say anything you would not want the public to know - this includes your full name, your address, phone number of other personal information.

3. Do not get together with someone you meet in a chat room. If you must, meet in a public place and bring along some friends.

4. Do not reveal your actual location or when and where you plan to hang out.

5. Choose a nick name that is not sexually suggestive and does not give away your real name.

6. If someone says or does something creepy - block them and do not respond.

7. If the topic turns to sex, just sign out. That can often lead somewhere you do not want to go.

4.4.1 Warning Signs for Parents

Warning signs of a child being targeted by an online predator include spending long hours online, especially at night, phone calls from people you do not know, or unsolicited gifts arriving in the mail. If your child suddenly turns off the computer when you walk into the room, ask why and monitor computer time more closely. Withdrawal from family life and reluctance to discuss online activities are other signs to watch for.

Contact any local law enforcement agencies such as the IT police if your child has received pornography via the Internet or has been the target of an online sex offender.

Taking an active role in your kids' Internet activities will help ensure that they benefit from the wealth of valuable information it offers without being exposed to any potential dangers.

5.0 Conclusion

Instant messaging and chat have become popular means of communicating online. Nowadays, youngsters perceive these as a means of keeping in touch with their friends and also as an entertainment. However, like most technologies, chatting has its goods as well as its bad sides. Therefore, to prevent any kind of abuse and threatening situations, parents always have to keep an eye on their kids whenever they are online. Parental controls need to be in place and kids need to be warned so that they know what information they can or cannot share online.

6.0 References

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