Extranet: A Secure Means for Sharing Information with Partners

While an intranet is used to disseminate confidential information within a corporation, an extranet is commonly used by companies to share data in a secure fashion with their business partners. Internet-type tools are used by content providers to update the extranet. Encryption and user authentication means are provided to protect the information, and to ensure that designated people with the proper access privileges are allowed to view it.

HISTORY OF THE INTERNET

More than just a technology, the Internet has become a way of life for many people, and it has spurred a revolution of sorts for both public and private sharing of information. The most popular source of information about almost anything is on the Internet as used daily by technical and non-technical users alike. With the meteoric rise in demand for connectivity, the Internet has become a major communications highway for millions of users. It is a decentralized system of linked networks that are worldwide in scope.

The development of computers and advances in the ability to link up several computer units within the same vicinity called the Local Area Network (LAN) and in remote locations called Wide Area Network (WAN) prepared the ground for the emergence of this powerful and awesome phenomenon which is known as Internet (INTERnational NETwork). The internet is a global network of computers linked together by telephone lines, microwave and satellite links to form a large single information pool. It is the most advanced, sophisticated and fastest growing information system available today.

The internet was as a result of some visionary thinking by people in the early 1960s who saw great potential value in allowing computers to share information on research and development in scientific and military fields. J.C.R. Licklider of MIT, first proposed a global network of computers in 1962, and moved over to the Defense Advanced Research Projects Agency (DAPGA) in late 1962 to head the work to develop it. Leonard Kleinrock of MIT and later UCLA developed the theory of packet switching, which was to form the basis of internet connections. Lawrence Roberts of MIT connected a Massachusetts computer with a California computer in 1965 over dial-up telephone lines. It showed the feasibility of wide area networking, but also showed that the telephone line's circuit switching was inadequate. Kleinrock's packet switching theory was confirmed. Roberts moved over to DARPA in 1966 and developed his plan for ARPANET.

The internet, then known as ARPANET, was brought online in 1969 under a contract led by the renamed Advanced Research Projects Agency (ARPA) which initially connected four major computers at universities in the Southwestern US (UCLA, Stanford Research Institute, UCSB, and the university of Utah). The contract was carried out by BBN of Cambridge, MA under Bob Kahn and went online in December, 1969.

In the 1970s, Arpanet grew, but in 1984, the National Science Foundation (NSF) of the US government built its own network research called the NSF net. Other US government agencies such as NASA followed and got their own networks. As the network grew, different internet domains were generated and standardized. They are com for commercial institutions, edu for education, gov for government, mil for military, net for network operations and services, org for nonprofit organizations while some are used for countries like za for South Africa ca for Canada, ng for Nigeria, fr for France, sa for Saudi Arabia and uk for United Kingdom, etc.

In 1993 the National Science Foundation, who had been running the network pulled out and the Net became open to anyone, anywhere.

Why the Internet?

The Internet is a fast, easy way to communicate. An email message can be sent anywhere in the world to any number of people and can arrive within minutes. Documents, pictures, sounds and video clips can be sent to anyone with internet access anywhere in the world. Software such as shareware packages, demos of commercial packages and games can be accessed. An enormous range of knowledge and data useful for research can be searched for and shared. Other advantages include News group (group on the internet that share news with one another about matters that interest individuals which range from commercial, business, sports, medical, etc.), Internet teleconference (people on the net that conduct real life discussion by typing your own contribution that others can read and reply), online training and learning (e.g. GRE, TOEFL, etc.), e-registration (e.g. WASSCE, NECO, JAMB, NYSC, etc.) and e-commerce/business.

Protocols (Rules of Networking)

Information is shared on the Internet by means of protocols. Protocols are rules that are followed by computers as standards of communications that allow them understand each other. Transferring data in the form of files is one of the most common uses of the internet. File Transfer Protocol (FTP) is one of the most popular method used for file transfer through the internet. The reason for its popularity is that it has the capability to transfer files between different types of computer. Computers that store information that can be transferred via FTP are called FTP servers. Those that store information that can be accessed by anybody are called anonymous servers. Some require a specific user name and password to login.

Table 3: Protocols

Acronym	Full Name	Purpose
FTP	File Transfer Protocol	For transferring files
SMTP	Simple Mail Transfer Protocol	For sending email
POP,IMAP	Post Office Protocol, Interactive Mail Access Protocol	For accessing email
MIME	Multipurpose Internet Mail Extensions	For enhancing email-especially for attachments
HTTP	HyperText Transfer Protocol	Used to transfer web pages

The World Wide Web

Developed by CERN in Geneva in 1990, the World Wide Web (www), also known as the web changed the face of the Internet to the extent that people mistakenly think the terms Internet and Web are synonymous. This hypertext system allows text, sound, video and pictures to be put on one page of information. These pages can, and often do, contain links to other pages whose source can be located anywhere in the world. The Web has made the internet much more user friendly and, as such infinitely more popular. It has brought about a time when anyone with the necessary resources can gain better access to information (to use the web to locate, read and download document stored on computer systems around the world). The Web is cross-platform, i.e. the same information can be viewed regardless of the type of computer you use. On the web however, the document are presented as a series of pages commonly known as web pages that are linked together to form a web site.

A web browser, such as Netscape, has the ability to enable access to many different forms of Internet distribution: FTP, the Web, Newsgroup and mail all through one application.

Web Server Addresses

Web pages that are accessible to all on the Internet are stored on special computers called as web server. Each web server is assigned a unique address e.g. www.state.gov.ng. Typically web addresses start with www. The name of the site is the name of the organization or person whose pages we are trying to access while "type of site" is a two or three characters code indicating the nature of work.

Domain Names

A Domain Name is the name by which an individual or organization chooses to be known on the Internet. It is needed for email addresses and for the names of servers connected to the Internet. Once registered it is recognized throughout the world and cannot be used by anyone else. The uniqueness of a domain name is crucial to the working of the Internet because it ensures that email names and web addresses can't be duplicated. See the following table to see how domain names are used:

Table 4: Domain Names

Name Type	Example
Domain name	City.ac.uk
Personal name	Bilbo Baggins
User ID	Ab123
Email	Ab123@city.ac.uk or b.baggins@city.ac.uk
Website server	www.city.ac.uk
Personal web space	http://www.student.city.ac.uk/~ab123
Unix CPU Server	Swindon.city.ac.uk

Email Clients

There are special mail programs available to compose, receive and send mail. They are referred to as email client as they reside on the user's computer and are used to communicate with the email server. Email client also offer other facilities like maintaining an address book of email addresses that make emailing very simple. Examples are Outlook express, Eudora etc.

Electronic Mail (E-mail)

This is a popular resource on the Internet for sending and receiving information. It represents a large portion of all Internet traffic and is for many the only Internet resource they use. It can be use for business and personal correspondence and exchange of information. Just like normal mail, addresses are required for the exchange of email. Everyday person who wishes to use or receive email must have an email address. When a user applied for an email address, an account referred to as his email address is created for him on the email server. All email addressed to him is received into this account. Email accounts are password protected, thus preventing other users from accessing the mail. There are various companies or web sites that provide free email addresses that you can use at your convenience and that allow you to access your messages from any computer connected to the internet. Some of these companies are Yahoo, Netscape, Hotmail, Google, etc.

The email address is of this format username@domainname.com: The username is the identity of the user whose account it is. The symbol @ separates the Username and the domain name. The domain name is the unique name given to the email server e.g. pacific.com. Domain name have two components. Thus pacific is the name of the Organization while com is the type of organization (e.g. net, org, etc.). this is also referred to as the Uniform Resource Location (URL)

News Group

Newsgroup allow for group discussion on specific topic. Some newsgroup focus on buying and selling, health, stamp collection, romance, politics etc. There are thousand of newsgroups, once a user gained access to newsgroup site there is no cost to subscribe to them. For example imagine that someone has joined a newsgroup involved in stamp collecting, as new message about this hobby are sent by other subscribing to his group the message become available to the newcomers. This person review not only what someone has sent to the newsgroup but also what others have written in response.

File Sharing and Topic Searching

One of the original Internet goal was global information sharing. File could be transfer between internet users located at different part of the globe within minutes. Search sites or search engines (e.g. yahoo, msn, ask, googles, etc.) can be used to locate resources on the internet. The user simply supplies a word or a phrase, the site then replies with a list of internet locations where the information can be found. Generally, the search is free and only takes a few seconds.

Browsers

A browser is a computer application that "understands" the languages (called protocols) of the internet used to view web pages. Examples include Internet Explorer, Netscape Navigator, Mosaic, e.t.c. Browsers that only show textual information are called Text Based Browsers e.g. Lynx, Alynx, edbrowse (Line-mode browser), ELinks, Emacs/W3, Net-Tamer, w3m, and WebbIE. They make it easy to pick and follow links by selecting appropriate highlighted text. Graphical web browsers allow the user to just point and click to access information. They have the capability to support hypermedia i.e. sounds, movies, formatted text, and graphics. The most popular of graphical browsers are Netscape Navigator, Internet Explorer, and Mosaic.

A browser is a window object made of five main sections: Title Bar, Menu bar, Toolbar, Address bar, and the viewing area.

This is a table of personal computer web browsers by year of release of major version, in chronological order.

Year	Web Browsers
	Pre-browser: HyperCard, Gopher
1991	Worldwide Web
1992	ViolaWWW, Erwise, MidasWWW, MacWWW
1993	Mosaic, Cello, Lynx 2.0, Arena, AMosaic 1.0
1994	IBM Web Explorer, Netscape Navigator, SlipKnot 1.0, MacWeb, IBrowse, Argo, Minuet
1995	Internet Explorer, Netscape Navigator 2.0, OmniWeb, WebRouser, Internet Explorer 2, Grail
1996	Arachne 1.0, Internet Explorer 3.0, Netscape Navigator 3.0, Opera 2.0, PowerBrowser 1.5, Cyberdog, Amaya 0.9, AWeb, Voyager
1997	Internet Explorer 4.0, Netscape Navigator 4.0, Netscape Communicator 4.0, Opera 3.0
1998	Internet Explorer 5.0 Beta 1, iCab, Mozilla, Opera 4

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1999	Amaya 2.0, Mozilla M3, Internet Explorer 5.0
2000	Konqueror, Netscape 6, Opera 4, Opera 5, K-Meleon 0.2
2001	Internet Explorer 6, Galeon 1.0, Opera 6
2002	Netscape 7, Mozilla 1.0, Phoenix 0.1, Links 2.0
2003	Opera 7, Safari 1.0, Epiphany 1.0
2004	Firefox 1.0, Netscape Browser, OmniWeb 5.0
2005	Safari 2.0, Netscape Browser 8.0, Opera 8, Epiphany1.8, Amaya 9.0, AOL Explorer1.0, Maxthon 1.0, Shiira 1.0
2006	SeaMonkey 1.0, K-Meleon 1.0, Galeon 2.0, Camino 1.0, Firefox 2.0, Avant 11, iCab 3, Opera 9, Internet Explorer 7, Sputnik
2007	Maxthon 2.0, Netscape Navigator 9, NetSurf 1.0, Flock 1.0, Safari 3.0, Conkeror
2008	Konqueror 4, Safari 3.1, Opera 9.5, Firefox 3, Amaya 10, Flock 2, Google Chrome 1
RC	Internet Explorer 8
Beta	Safari 4, Camino 2
Alpha	Opera 10, SeaMonkey 2, Google Chrome 2

Web Site/Web Page

A web page is an area of text and other fancy visual effects that you see when you get on the internet (actually it is a file but we haven't learned yet what a file is). A web site is a group of web pages that belong to one section of the internet, such as one person, one company, one school, or one government agency, etc (a web site is similar to a folder or directory but we haven't learned what a folder or directory are).

When you get on the internet, you actually access one or different web pages from one or different web sites. To access a web page, you must first get to the web site to which the web page belongs and you must know the name of the web page. The combination of a web page and the web site it belongs to is called its address. To get the address of a web page, you have four main options:

- If you know the web site that published the web page, you must first go to that web site. To do this, after opening the browser, in the address box, you can type the (complete) address of the page

- If you have already been to that web page before, you may have book marked it. In this case, you can "recall" the web page using the main menu of the browser or a button on the browser

- If somebody sent you the address, on the document (such as an email) that was sent to you, you may just click the address that was sent to you (called a link) and the browser would automatically open the web page

- If you are already on the internet and perform a search, the page that allowed you to do the search will present you with the address (called a link) of the page. You can just click it and you would be taken to that web page

A Link

A link is a word or a sentence that, when clicked, would lead you to a web page or produces an internet-related action. Because a link is meant for the internet, it is usually displayed in a different color although this depends on the person who created the link. There are two main ways you get a link:

- Somebody may send it to you as a reference or an indication

- If you are already on the internet, you may see some words or sentences that coincidentally all display in the same color

The color of the link is not really what makes it a link. It is the result of what it produces that makes it a link. To distinguish a link from the other text on a document or a web page, when you position your mouse on it, the mouse pointer usually changes into a closed hand with a pointing finger. A link can also be created on a picture. To indicate that a picture holds a link, when you position your mouse on it, the pointing finger cursor appears.

Search Engines

Although the internet is highly rich with information, that information is not always organized the way you particularly expect. When "browsing", you may find it hard to get the particular information you want. To provide an alternative, there are some specialized sites that can perform the search for you, with more or less accuracy. These sites are referred to as search engines. Some of the most popular of them are Google.com, Yahoo.com, Alexa.com, MSN.com, Netscape.com, Altavista.com, and Search.com.

To do a search, first access a search engine site. Each one of them provides you with a convenient box in which you can type the word or sentence to search and press Enter. After a few seconds, the results would be displayed in a list. You can then click each link and check it. Most of the search engine sites provide more services than searching the web. For example, both Yahoo and MSN provide free email addresses and the ability to check your email messages. Some of them also allow you to look for a job, a relationship. Most of them allow you to shop. Many of them also provide news, etc.

Even though the internet simplifies accessing information, its vastness makes it a little difficult to find relevant information quickly. To make searching easier, search engines were developed. They are software on the web that help internet users to look for specific information. Search engines usually refer to websites that are used to search for data on the web. They search for information on the web on the basis of certain keywords specified by the user. The result of the search is a list of documents that contain the keywords. However, the list of found documents could be long, to narrow down the search; there are several options that can be applied. E.g. putting the phrase in quote, the plus and the minus sign.

Use the plus sign when you want to find articles that contain all of the words you enter. Example, to find article on rock and roll music, just type rock + roll + music. Use the minus sign to limit your results to articles with only the words you want. Example, if you want articles about pets, but you are not interested in dogs, just type pets-dogs. Do not leave any space between the signs (+, -) and the word you want to leave out.

Phrase it: Search for ideas and concepts instead of just word, using more than one word in your search. To find complete phrase, just put quotes around the words that you want to find together. For example, to find information on the small scale Business, type" Small Scale Business" (in quotes). Using quotes tells the search engines to look for that exact phrase.

Downloading

Downloading is the ability to get something from the internet and put it in your computer. By default, downloading means that you decide when to get that thing. Unfortunately, some things get into your computer while using the internet. Some of these things don't bother your computer; some others do. This is why you should be restrictive with the sites you visit.

By default, sites of big corporations, government agencies, and schools are less harmful, almost not harmful because they are more accountable or more responsible. In fact, most responsible or accountable businesses run sites that are not harmful at all (you are extremely unlikely to get a disease, I mean a virus, from the web site of a big corporation or a government agency).

Like everything else in life, the internet was abused and is now the source of some bad behaviors. There is no strict list of things you should do or sites you should not visit. So, welcome to this world of the Internet.

Because of bad behaviors some people and corporations have witnessed on the internet, if you work for some corporations or government agencies, or if you are accessing the internet using a public or school's computer, you may not be able to just download anything you want, and these decisions are right (if you want to download harmful things, do it at home or using your own computer; create your own bad experience, be your own victim, learn from your own mistakes; don't do it on someone else's computer. This means that, if a school, an agency, a business, or a corporation prevents you from using the Internet any way you want, it is a valid decision they make and you should live with it).

Many big corporations offer free and safe things you can download (big corporations are more responsible and accountable; they can't take the risk of having their name dragged to the mud). For example, if you plan to get into programming, you can check offerings from http://www.sun.com/, http://www.borland.com/, or Dev-C++. I didn't cite Microsoft, not because I hate the company (I don't) but because most of its free offerings I can remember may be installed in your computer already, such as Internet Explorer, Microsoft Works (which is not really free, it is just that if you buy your computer in a store, it may have Microsoft Works already but if you don't have Microsoft Works and you nee it, you would have to purchase it) or the .NET Framework (the .NET Framework is not really free and it is not a program by itself anyway, it is a library whose job is to complete the operating system; fortunately, while doing that, it comes with free programs for programmers, not for casual users).

Chat or Internet Teleconference

Chat allows group of people to send messages to one another immediately in real time, once connected with a large number of other users form all around the world. Chat rooms are created in such that feature a particular theme, such as romance, politics, fictions, science, movies, sport etc. All the messages typed within a chat room appear almost simultaneously on the computer screens of all participants for that chat room.

A chat room is much like a party of people mingling and talking at the same general time, except that are typing short messages instead.

Telnet

This is a program that is designed to allow user to log into another computer on the internet as a user on that system. With this, a user can log into a server to access information stored on it. However, the only those users that have been allowed access by the organization can login to the server. Organizations make use of the telnet to make a part of their system available to outsiders.

DISADVANTAGES OF USING COMPUTER

The importance of computer cannot be overemphasized but there are lots to it than neglecting its demerits. Although, this aspect may be viewed based on where you are located in the world. In fact, the most efficient technology that has ever evolved is this information age that is based wholly on computer. Some of the negative points people raise about computer include computer fraud, security and privacy, and unemployment.

TYPING/KEYBOARDING

Now that you know how to use the mouse, the keyboard, and the Internet, you should learn keyboarding. Keyboarding is the ability to type professionally. Although it may appear as a waste of time, it absolutely is not. In fact, you should invest in learning it.
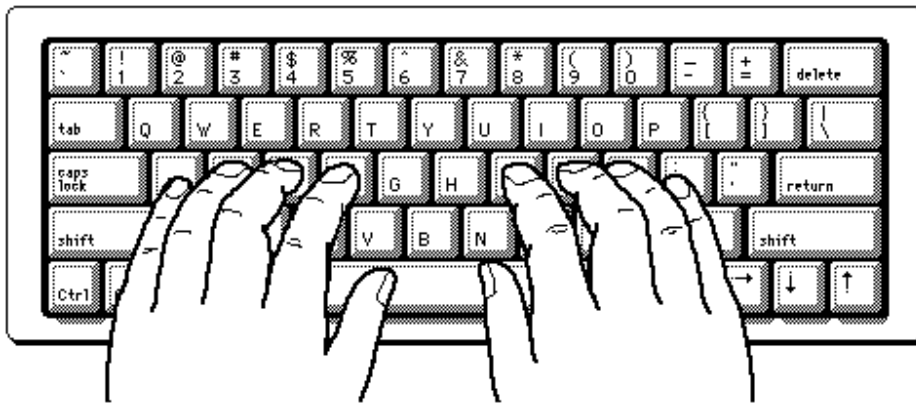
If you are taking a class at an institution, the school may (should) provide equipment to you to learn keyboarding. If you are on your own, you can go to a computer store and purchase software that would guide you with keyboarding. There are many sites that provide good lessons on keyboarding. On a search engine web site, do a search on "keyboarding". Check different sites to see what they offer. Besides, sites change all the time. The features to look for are that: the early lessons should show you how to position your fingers, the early lessons should start on the middle characters, for QWERTY keyboard, these should be asdf;lkjg and h. Other than that, the whole thing is about practicing and, unfortunately, no one else can do it for you.

USING HELP AND SUPPORT KEYBOARD SHORTCUTS

If your mouse is unavailable or if you prefer using your keyboard, you can use the following keyboard commands to navigate within Help and Support Center.

Table 5: Help and Support keyboard shortcuts

Press	To
ALT+F4	Close Help and Support Center.
ALT+LEFT ARROW	Move back to the previously viewed topic.
ALT+RIGHT ARROW	Move forward to the next (previously viewed) topic.
ALT+SPACEBAR	Display the System window menu.
ALT+TAB	Switch between the open windows.
CTRL+A	Select all text in a pane.
CTRL+END	Move to the end of a topic.

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adebisijeleel@yahoo.com or adebisijeleel@gmail.com

CTRL+HOME	Move to the beginning of a topic.
CTRL+P	Print a topic.
CTRL+SHIFT+TAB	Switch to the previous pane.
CTRL+TAB	Switch to the next pane.
DOWN ARROW	Move down one item in the Index, search results, or list of Help topics.
F6	Switch focus between the different panes in Help and Support Center.
PAGE DOWN	Move down one page in the Index, search results, or list of Help topics.
PAGE UP	Move up one page in the Index, search results, or list of Help topics.
SHIFT+F10	Display the Help and Support shortcut menu.
UP ARROW	Move up one item in the Index, search results, or list of Help topics.
UP ARROW or DOWN ARROW	Scroll through a topic.

Table 6: Index keyboard shortcuts

Press	To
ALT+D or ENTER	Display the associated topic.
TAB	Place the cursor in the list of keywords.
TAB to Index, and then press ENTER	Display the **Index**.
UP ARROW or DOWN ARROW	Select a keyword in the list.

Table 7: Search keyboard shortcuts

Press	To
ALT+S	Start a search.
ENTER	Display the selected search result.
TAB or SHIFT+TAB	Select a search result in the list.

Table 8: General keyboard shortcuts

Press	To
ALT+ Enter	Displays the properties of the selected object.
ALT+ Underlined letter in a menu name	Display the corresponding menu.
ALT+ENTER	View properties for the selected item.
ALT+ESC	Cycle through items in the order they were opened.
ALT+F4	Close the active item, or quit the active program.
ALT+PRINT SCREEN	To make a copy of the active window
ALT+SPACEBAR	Opens the shortcut menu for the active window.
ALT+SPACEBAR	Display the System menu for the active window.
ALT+TAB	Switch between open items.
BACKSPACE	View the folder one level up in My Computer or Windows Explorer.
CTRL while dragging an item	Copy selected item.
CTRL+A	Select all.
CTRL+C	Copy.
CTRL+DOWN ARROW	Move the insertion point to the beginning of the next paragraph.

CTRL+ESC	Display the **Start** menu.
CTRL+F4	Close the active document in programs that allow you to have multiple documents open simultaneously.
CTRL+LEFT ARROW	Move the insertion point to the beginning of the previous word.
CTRL+RIGHT ARROW	Move the insertion point to the beginning of the next word.
CTRL+SHIFT while dragging an item	Create shortcut to selected item.
CTRL+SHIFT with any of the arrow keys	Highlight a block of text.
CTRL+UP ARROW	Move the insertion point to the beginning of the previous paragraph.
CTRL+V	Paste.
CTRL+X	Cut.
CTRL+Z	Undo.
DELETE	Delete.
ESC	Cancel the current task.
F10	Activate the menu bar in the active program.
F2	Rename selected item.
F3	Search for a file or folder.
F4	Display the Address bar list in My Computer or Windows Explorer.
F5	Refresh the active window.
F6	Cycle through screen elements in a window or on the desktop.
LEFT ARROW	Open the next menu to the left, or close a submenu.
PRINT SCREEN	To copy the entire screen as it appears on your monitor
RIGHT ARROW	Open the next menu to the right, or open a submenu.
SHIFT when you insert a CD into the CD-ROM drive	Prevent the CD from automatically playing.
SHIFT with any of the arrow keys	Select more than one item in a window or on the desktop, or select text within a document.
SHIFT+DELETE	Delete selected item permanently without placing the item in the Recycle Bin.
SHIFT+F10	Display the shortcut menu for the selected item.
Underlined letter in a command name on an open menu	Carry out the corresponding command.
ALT + CTRL + DOWN [OR UP, LEFT OR RIGHT] ARROW	Changes the orientation of the wall paper to the selected direction

Table 9: Dialog box keyboard shortcuts

Press	To
ALT+ Underlined letter	Carry out the corresponding command or select the corresponding option.

Arrow keys	Select a button if the active option is a group of option buttons.
BACKSPACE	Open a folder one level up if a folder is selected in the **Save As** or **Open** dialog box.
CTRL+SHIFT+TAB	Move backward through tabs.
CTRL+TAB	Move forward through tabs.
ENTER	Carry out the command for the active option or button.
F1	Display Help.
F4	Display the items in the active list.
SHIFT+TAB	Move backward through options.
SPACEBAR	Select or clear the check box if the active option is a check box.
TAB	Move forward through options.

You can use the following keyboard shortcuts with a Microsoft Natural Keyboard or any other compatible keyboard that includes the Windows logo key (WIN) and the Application key (APL).

Table 10: Natural keyboard shortcuts

Press	To
APL	Display the shortcut menu for the selected item.
CTRL+ WIN+F	Search for computers.
WIN	Display or hide the **Start** menu.
WIN + Shift + M	Restores minimized windows.
WIN + Tab Key	Circles through the taskbar buttons
WIN+ L	Lock your computer if you are connected to a network domain, or switch users if you are not connected to a network domain.
WIN+BREAK	Display the **System Properties** dialog box.
WIN+D	Show the desktop.
WIN+E	Open My Computer.
WIN+F	Search for a file or folder.
WIN+F1	Display Windows Help.
WIN+M	Minimize all windows.
WIN+R	Open the **Run** dialog box.
WIN+U	Open Utility Manager.

Table 11: Accessibility keyboard shortcuts

Press	To
Left ALT +left SHIFT +NUM LOCK	Switch MouseKeys on and off.
Left ALT +left SHIFT +PRINT SCREEN	Switch High Contrast on and off.
NUM LOCK for five seconds	Switch Toggle Keys on and off.
Right SHIFT for eight seconds	Switch Filter Keys on and off.
SHIFT five times	Switch Sticky Keys on and off.

Table 12: Windows Explorer keyboard shortcuts

Press	To
END	Display the bottom of the active window.
HOME	Display the top of the active window.

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LEFT ARROW	Collapse current selection if it's expanded, or select parent folder.
NUM LOCK+ASTERISK on numeric keypad (*)	Display all subfolders under the selected folder.
NUM LOCK+MINUS SIGN on numeric keypad (-)	Collapse the selected folder.
NUM LOCK+PLUS SIGN on numeric keypad (+)	Display the contents of the selected folder.
RIGHT ARROW	Display current selection if it's collapsed, or select first subfolder.

If you choose not to apply Windows key combinations to your Remote Desktop sessions, you can use these Terminal Server shortcut keys to perform many of the same functions.

Table 13: Terminal Server Keyboard shortcut

Shortcut key	Description
ALT+DELETE	Displays the **Windows** menu.
ALT+HOME	Displays the **Start** menu.
ALT+INSERT	Cycles through the programs in the order they were started.
ALT+PAGE DOWN	Switches between programs from right to left.
ALT+PAGE UP	Switches between programs from left to right.
CTRL+ALT + END	Brings up the **Windows Security** dialog box.
CTRL+ALT+ Minus (-) symbol on the numeric keypad	Places a snapshot of the active window, within the client, on the Terminal server clipboard (provides the same functionality as pressing Print-Screen on a local computer.)
CTRL+ALT+ Plus (+) symbol on the numeric keypad	Places a snapshot of the entire client window area on the Terminal server clipboard (provides the same functionality as pressing ALT+ Print-Screen on a local computer.)
CTRL+ALT+BREAK	Switches the client between a window and full screen.

FILE PROCESSING

We have learnt some few things about computing to include the basic knowledge and typing. At this point, any work done need to be preserved for future reference. Hence, either when we closed the application or shut down the computer, all our valuable work will be gone. Most of the time, after creating something using an application, you may want to keep it for later reference. You may even want to give or send it to someone else. File processing consists of creating something on a computer and keeping it. The thing you keep is called information or datum. The plural of datum is data. In some cases, the word data can be used in both singular and plural forms. There are various issues related and different techniques used to keep data.

A medium is an object used to hold information in a computer. The plural of medium is media. There are various kinds of them.

1. Internal Hard Drives

The primary object used to hold information in a computer is called the hard drive: