



User Manual

Version 1.5.0.0-1

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General

About this manual

This manual is the result of volunteer work. We urge you to receive it in the same spirit.

This manual is *not* part of xplorer² Professional package: the Professional version carries its own help file (**Help|Quick Start** menu). On the other hand, this manual is freely available as a separate download from the xplorer² website. It is designed for both **Lite** and **Professional** versions.

A free help file for a shareware? How's that?

Well, it actually started out when xplorer² was originally envisaged as a single freeware product. I have created this manual as a tribute to Nikos' generosity in offering excellent products such as **2xExplorer** and **xplorer² Lite** as freeware.

Although made for the free (**Lite**) version, the manual covers all the features provided in the **Professional** version, because it is envisaged that many of these features will eventually find their way in the **Lite** version.

You can also contribute in making of this manual:

If you would like to contribute in the next revisions of this manual, you may volunteer (see the copyrights clause below).

Version information

The version number of this manual is in **xx.xx.xx.xx-y** format, where-

- The **xx.xx.xx.xx** number is the version of x² Professional.
- The **y** number describes the versions of the manual for a given **xx.xx.xx.xx** number. (For a given **xx.xx.xx.xx** number, the y-number always begins with "1" (original issue), and gets incremented whenever the manual is changed).

The version number of the manual appears on the cover page and also at the footer of each page. The version number of x² appears in the **Help | About** menu. If these numbers don't match, check the website for latest manual.

What is new in this version

To see what has changed vis-à-vis the last version, see **Appendix 9U**.

(Note: hyperlinks appear in **brown text**, not the usual **blue underlined** text!)

Copyrights

All copyrights for the manual rest with **Nikos Bozinis**, the author of **xplorer² Professional** and **xplorer² Lite**. As this manual is prepared entirely as volunteer effort, the author(s) of this manual have no commercial stake in the

xplorer² products. It is understood that any volunteers preparing (or revising or translating) this manual will have no claims of proprietorship on the manual or parts of it.

We have taken due care to use original material while making this manual. In case you notice any copyright infringement in this manual, please post a message at the x² website, and we will take necessary steps immediately.

The copyrights for these products themselves are described in the installer of the products. Please read them carefully before installing.

This manual mentions several other freeware and commercial products, including Microsoft Windows, Microsoft Office, OpenOffice, GIMP, etc. (especially, see [chapter 8](#)). The copyrights of these applications belong to their respective developers. For further details, please refer to the documentation and/or websites of the concerned products.

License Agreement

This is only a summary of your license with ZabKat. For full details please refer to **licence.txt** in the installation folder.

- xplorer² is licensed, not sold. You only acquire the right to use the software.
- The professional version is licensed on a per-user or on a per-machine (PC) basis. One user for many machines is ok, as well as many users on the same computer. However many users on many machines require multiple licenses (one per PC)
- The **Lite** version is free, but strictly for private and academic use (non-profit).

Updates policy

- In general there aren't going to be many updates; or at any rate, they will be infrequent. x² is a near-complete package as it is.
- From time to time, there will be “service packs” whenever serious bugs are discovered. Upgrades policy

The **Lite** version is generally unsupported.

If you obtain a license for the professional version, you are entitled to free bug fixes whenever they become available.

For featured (major) updates, the policy is as follows:

- If there's a new release within a year of your purchase, you can upgrade by paying just the price difference, if any.
- For releases beyond the first year, you will be entitled to discounts, according to the price you originally paid and the elapsed time.

1. Using this manual

This chapter explains how users with different levels of skills can use this manual. Later sections in this chapter show what help is available apart from this manual. How this manual is organized

- This (first) chapter explains how to get the maximum benefit out of this manual.
- The **second chapter** introduces you to x^2 . All features of x^2 are listed here. This chapter also specifies minimum system requirements for running x^2 .
- The **third chapter** explains different parts of x^2 's windows, and what are their basic functions. The **fourth chapter** explains how to use these parts.
- The next two chapters cover all operations of x^2 . Starting from operations with files, we will proceed to operations with folders, and then more advanced operations such as synchronizing directories. The **fifth** chapter describes the bulk of x^2 's functionality, and the **sixth** chapter describes the advanced features.
- The **seventh** chapter shows how to customize x^2 to suit your own tastes and needs.
- The final (**eighth**) chapter is rather special: it focuses on *you*. It shows how you can be more productive in your professional and personal lives. (In other words, this chapter is more on *life*-management, rather than on *file*-management!)
- The **appendices** provide additional information about commands, look up charts and other useful reference data such as EXIF tags.

The sequence is just like how we learn to drive a car: First we see how the dashboard looks like and what are the different parts for. Then we learn to use the brake and release the clutch. Then we take the car on the road and learn elementary driving skills. Then we learn car-racing tricks, meant for the adventurous. Finally we read about how to maintain the car and how to get the best out of it.

How to use this manual

Depending on how familiar you are with x^2 , you can choose from the following options:

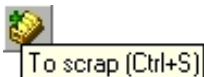
- All users should read the first four chapters. Then decide what to read next:
 - New users will benefit the most by reading *all* chapters in the given sequence.
 - Experienced users can refer to the **Table of Contents** (or use the

Bookmarks tab) and directly go to the topic of their interest. After that, you may read the chapters in any random order: Hyperlinks (appearing in **brown text**) are provided throughout the manual. Use them to look up unfamiliar terms (*backward reference*), or to see more details (*forward reference*).

- Do read the productivity tips provided in **chapter 8** (preferably, after reading the earlier chapters, so you can understand the tips better).
- Click on the **bookmarks** panel (on the left) to see all topics in a hierarchical tree. Click on any bookmark to jump there. The **bookmarks** panel is also useful to locate your current position in the manual (so that you don't get "lost"!).
- The top of each page carries three hyperlinks: (a) To the previous chapter (click on the **blue** title at left), (b) to the beginning of the current chapter (click on the **red** title in the middle), and (c) to the next chapter (click on the **blue** title at right).

Try the links on this page! (You can use the Acrobat Reader's **Back** button to come back to this page.)

- You can search the manual for any keyword (Press **CTRL+F** to search).
- Some people feel more comfortable with an application if they can understand its menus and toolbars. If you prefer this approach, read the first four chapters, and then go to **Appendix 9D**, which is a lookup chart for all menus, commands, their keyboard shortcuts and toolbar buttons.
 - You don't have to *visually* locate a toolbar button in the table: just check its tooltip in x^2 (hold your mouse pointer on the button for a couple of seconds to see its tooltip). Now search for that text in the table.



For example, to locate the toolbar button shown on left, look at the text in its tooltip; which is **To scrap (CTRL+S)**. Use **CTRL+F** command in **Appendix 9D** to search for either *To scrap* or *CTRL+S*.

- You can take a print of the lookup chart (**Appendix 9D**) and use it as a ready reference till you can remember all the commands you usually need.
 - You can print this entire manual and use it. (Please save paper: use *both* sides of paper while taking print!) To look up any topic, first refer to the **Table of Contents**. If you don't find it there, try the **Index** at the end of the manual. (Keep in mind, though, that the printed version will lose the benefit of hyperlinks provided in this manual!)

Tips for non-English users

We hope this manual is not too difficult for you.

If you are not familiar with English words and phrases, download a free dictionary called **WordWeb**. Once installed, this utility stays in the System Tray. To understand any word used in this manual, just double-click on it to highlight it and then press **CTRL+ALT+W** (the global keyboard shortcut for WordWeb).

Apart from English, the main problem you will face is that your menus and tooltips will not match the screenshots provided in this manual. Further, in some cases, the translation may not be verbatim.

To solve that problem, refer to **Appendix 9D**, which lists the menus in their *exact* sequence as they appear in x^2 . To locate any command, try to recognize the neighboring buttons and commands in the tables. Also look at the **main screen** screenshot, which explains how different parts work. Here is another trick that will solve the problem:


1. Install an English version of x^2 side-by-side. (Run the installer twice: once for your chosen language and the second time for the English version).
 - You can place the shortcut for the English version on **Desktop** or in the Quick-Launch Bar. (That will make it easy for you to launch the English version whenever you want.)
 - By default, x^2 runs a single instance. So, when your version is already running, the English version will not run. To allow the English version to run simultaneously, you will have to **edit the properties** of the English shortcut, and add **/P** to it.
2. Whenever you cannot understand any part of the GUI, start the English version of x^2 . Look at the same tooltip/menu to find its English equivalent. Now search for that word in this manual.

Getting help

x^2 provides help at your fingertips, as explained below.

The multi-level help available with x^2

For your convenience, help in x^2 is divided in **eight** different levels: the basic help is available right at the point of your work, so that you don't have drop what you are doing in order to get help. More advanced help is available in separate documents. All levels of help are described below:

1. When you hover the mouse over any toolbar button or menu item, the message bar (at the bottom of the screen) explains their function. If the basic function can be modified by pressing another key (such as **ALT**, **CTRL** or **SHIFT**) simultaneously, the message bar gives you that tip.
2. Hover the mouse pointer on any toolbar button to see tooltip that explains its function, and its equivalent keyboard shortcut (if any).
3. In dialog boxes, some options are explained with *expanded* tooltips.
 - To see these tooltips, just hold your mouse for a couple of seconds over a radio button ☐, checkbox ☒ or input box.
4. Context-sensitive help is available in all dialog boxes of x^2 : The title bar of each dialog box contains a  button. Click on this button first, and then click on any part of the box. You will be taken to the relevant part of the HTML help file.
5. Use the **Help | Quick start** menu option to see a brief overview of x^2 .
6. Use **Help | Tip of the day...** menu option to see many tips on using x^2 . This dialog box pops up automatically whenever you start x^2 .
 - If you like to read the tips in a plain list form, read the file



x2tips.doc located in x²'s installation folder.

7. The installation folder of x² contains a small text file that describes changes that have taken place in various versions of x².
8. Press **F₁** to read *this* manual, which is the ultimate reference for x².

Most of the information you will ever need is already packed with x². However, should you need answers to specific questions, help is also available from the following sources:

x² home site

Visit www.zabkat.com for updates and news. For the customer care center, you can go directly to http://www.zabkat.com/support_x2.htm

User forum

The **User Forum** is a website that supports you in many ways:

- Exchange ideas with other users
- Suggest new features
- Register a complaint about a bug
- Learn some new tricks from experienced users
- Get clarifications for any hard-to-understand operation.

Joining the forum is free. You do **not** have to provide personal information to join.

The x² user forums are very active, and usually all your queries are answered *on the same day*. So once you put a query, be sure to visit often!

Keep in mind that the user forum is a *shared resource*: always be mindful of the other users.

Before posting your question there, be sure to search this manual (use the **CTRL+F** command). If you do not find the answer, try synonyms and equivalents of your original keyword. If your query is not found, try the forum. Here too, first search for your query, using synonyms. If it is not found, *only then* put a question.

We have found that most of your queries are already answered in this manual or in one of the forums.

Remember: If the same question is paraphrased and repeated in multiple threads, the forum bloats in size. Locating your answers in such a bloated forum becomes much more difficult.

Some tips to get the best out of the User Forums:

- While describing x²'s GUI, use the *exact terms* used in this manual. Especially if you are a **non-English user**, please do not try to translate a term from your mother tongue; otherwise the English-speaking users will not be able to recognize it!
- While posting your question, provide as much detail as possible
 - Exact sequence of steps followed when the problem appeared
 - Pattern in the problem: When it occurs consistently and when it does *not* occur at all. (A repeatable problem is easier to solve. A “one-off” or randomly occurring problem is difficult to trap.)
 - PC hardware (e.g. Pentium 4 with HT, running at 2.8 GHz)

- Windows version, including *service pack* (e.g. XP with SP-2)
- If you had posted a problem at a forum, always provide a feedback about the steps you took and the results you got.
 - If the proposed solution works, others will learn from it.
 - If it does *not* work (or creates some *other* problem), let other users give you further advice. At least, your timely feedback will alert the others, so that *they* can avoid the problem!

Also, observe netiquette rules:


- Be polite: never post rude messages or swearwords.
- We were all newbies once. So, always be tolerant of naïve-sounding questions from others, and try to help. (Keep in mind that the user may be a top-notch expert in some *other* field!)
- Some users have a genuine problem in articulating their problem. (In some cases, that is because English is not their native language.) Accommodate them by guessing their problem. Rephrase the question and post it with your answer, so that everyone can understand it better. (In some cases, the user may reply that he meant something else!)
- If some users try to goad you, avoid the urge to get even: It only makes things ugly. Let the moderator handle the situation.
- Sometimes, you may get a deliberately oversimplified answer. We do this to satisfy a lot of queries in one shot. (In other words, this answer is aimed at *other* users also, who might have a related, but *slightly different* problem.) Do not take it as an insult to your intellect!
- Concentrate on the *issue at hand*; never try to deride others for their attitude, beliefs, *handle* or standpoint.

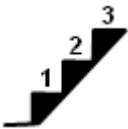

Terms and symbols used in this manual

Throughout the manual, the following symbols and terms are used:

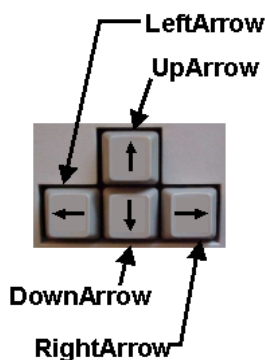
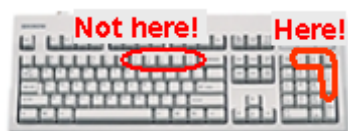
Symbols used

Several symbols are used in the left margin of this manual, so that you can quickly locate the relevant section.


Symbol	Meaning
	<p>Warning/caution that you must (or, in some cases, must <i>not</i>) do certain things.</p> <p>If you ignore these warnings, you may lose some files, folders or data.</p> <p>Therefore, even if you skip the rest of this manual, you <u>must</u> at least read <i>all</i> warnings/cautions!</p> <p>The accompanying text is shown in <i>red, bold, italic font</i>.</p>

	<p>Step-by-step method (to achieve a certain objective).</p> <p>x^2 is so intuitive to use that you can use it logically, without reading this manual. But in case you <i>are</i> facing any problems, you can always jump to the relevant chapter and then look for this symbol to do a quick crosscheck.</p>
	<p>Tip: An idea on how to exploit a feature of x^2.</p> <p>Some tips show you how to use a few features of x^2 together to achieve a far better result.</p>

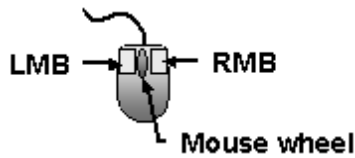
General terms



Term	Meaning
Any key	<p>Any key on (main part of) the keyboard.</p> <ul style="list-style-type: none"> ➤ Do not look for a key that is marked “ANY”! ➤ Do not use the <i>Special Function</i> buttons located at the top of the keyboard (marked F1...F12) ➤ Some keyboards have extra buttons (usually at the top) for Internet access, email, CD/DVD player, volume control, mute, power on/off, sleep/hibernation, etc. Do NOT use those keys!
Gray+ Gray- Gray*	<p>These keys are located in the NumPad (=Number Pad, the group of keys on the extreme right of your keyboard). The “Gray” in their names refers to old practice of having gray-colored keys for these functions.</p> <p>You will also see the -, + and * characters on the keys located at the top of your main key group. But these other keys cannot be used in place of Gray+, Gray- and Gray*.</p>
GUI	<p>Short for Graphic User Interface. All screens, windows and their parts (such as menus, buttons, panes, etc) collectively form the GUI.</p>
LeftArrow RightArrow UpArrow DownArrow	<p>This group of keys is located between your main keys group and the NumPad. Note that some keys in NumPad also provide the same function when the NumLock key is <i>not</i> active. Do <i>not</i> use NumPad for the arrow keys.</p>

Term	Meaning
Menu navigation	<p>When navigating a menu system, all the steps are described in “shorthand” by just separating the keywords with a “ ” symbol. For example, File Edit means <i>first click on the File menu, and then from the list that pops up, select the Edit option.</i></p> <ul style="list-style-type: none"> ○ A special case: the PC taskbar has a  button (usually in left-bottom corner of your screen). We will use the same notation format to describe the menus launched from this button. (e.g.. Start Control Panel Mouse)
NN	Network Neighborhood.
+ (as in ALT+C)	<p>Press the keys <i>together</i> (as opposed to pressing them one by one). (Example: ALT+C means press the ALT and C keys together.)</p> <p>Don’t worry if you can’t press these keys at the <i>same moment</i>: it is not possible anyway! Just make sure that the modifier key (SHIFT or CTRL or ALT) is pressed first, and the <i>letter</i> key is pressed afterwards.</p> <p>Note that in such key combinations, the letter (in this example, C) is shown in capital for better readability. Do <i>not</i> try to enter a <i>capitalized</i> letter by pressing the SHIFT key (or pressing the Caps Lock key).</p>
Item	A general term, which means “file” and/or “folder”. (This term is used while describing commands that work on both files and folders.)
Scrolling	Move through text or graphics in order to display parts that do not fit on the screen. Usually, the mouse wheel or arrow keys are used for this purpose.

Mouse-related terms



Term	Meaning
LMB	<u>L</u> eft <u>M</u> ouse <u>B</u> utton
RMB	<u>R</u> ight <u>M</u> ouse <u>B</u> utton
Click	Press your LMB once and release it.
Hover	Hold the mouse pointer over an item for a couple of seconds, <i>without</i> clicking.
Check	Click in a blank checkbox so that a tick mark appears. <input type="checkbox"/> → <input checked="" type="checkbox"/>
Uncheck	Click in a ticked checkbox so that the tick mark disappears. <input checked="" type="checkbox"/> → <input type="checkbox"/>
D-click	<u>D</u> ouble-click (Click the LMB twice, in <i>quick</i> succession) Tip: If you are not quick enough, x ² will interpret the action as two single clicks. You can alter the PC's response time with this menu option: Start Control Panel Mouse
R-click	<u>R</u> ight-click (Press the RMB once and release it).
Drag-n-drop	Place your mouse pointer on the selection, and then press the LMB. Without releasing LMB, move the mouse till the pointer reaches the destination. Then release the left button.
R-drag-n-drop	<u>R</u> ight-drag-n-drop: Similar to drag-n-drop, but done with the <i>RMB</i> .
Context menu	The menu that pops up when you r-click on any part of x ² 's GUI. It gives you options that are suited to the <i>context</i> .
Throw a lasso	This is a technique to select multiple items simultaneously. A "lasso" is a loop of rope that is thrown around the neck of an animal to capture it. In a similar way, you click the LMB and then "draw" a rectangle around some items to "capture" (select) them. While you are dragging the mouse, a dotted line rectangle appears on the screen. Items coming under this rectangle get highlighted (selected). When you release the LMB, the dotted rectangle vanishes, and you get a selection of items.

Notes: Your PC has a setting to swap the functions of the left and right mouse buttons (available through the menu **Start | Control Panel | Mouse**). This is useful for left-handed people, or if you have pain in the hand or fingers, then you can relieve the pain by using other hand/fingers for the job. If such a reverse-setting is in effect, then whenever you see LMB in the text, remember to use the *RMB*, and vice versa.

2. Introduction

x² at a glance

xplorer² (x² for short) is a powerful, tabbed dual-pane file manager, yet deceptively simple to use. It offers all the “modern” shell features as windows explorer, but repackaged in an altogether more functional and consistent manner.

To see x²'s powerful functions at a glance, open the **Bookmarks** pane (on the left) and look at the topics listed under chapters 5 and 6. x² features

x² provides a lot of powerful features: See **Appendix 9A** to see the extra features you get as compared to your Windows Explorer.

Appendix 9A also compares the **Lite** and the **Professional** versions. While the **Professional** version is fully loaded with features, certain advanced commands are disabled in the **Lite** version.

What's new in this version of x²?

New features in every version are listed in *changes.txt* file located in the folder in which you have installed x².

System requirements

x² will run on all win32 platforms (95/98/ME/NT4/2000/XP). However, a subset of its features depends on windows services that may or may not be available on all PCs. In most cases you can get full functionality by installing a recent version of **Internet Explorer**.

Feature	Requirements
Toolbars	Windows 95 with Internet Explorer v.3 or better
Thumbnails	Windows 98 or NT4 with Active Desktop update
File comments	Windows NT4 (NTFS formatted partitions)
FTP	Internet Explorer v.3
Zip folders	Windows ME or Windows XP (for windows 2000 please see FAQ #B4)
Audio/Video preview	Windows Media Player v.6
Column handlers	Windows 2000 for extended file information
Text filters	Windows 2000 or later. For PDF see FAQ D3

Editor²

The installer also installs a simple but powerful text-editor called **editor²**,

which is fully integrated with x². See **Appendix 9Q** for help on editor².

Note: editor² requires richedit control version 2 (riched20.dll version 5.30.xxx or later), which may not be present on systems other than Windows 2000 and XP. However, this is not an issue, because you can associate any external editor with x².

Installation and uninstallation of x²

Installing x²

Just double-click on the installer. However, x² doesn't really need an installer, since it merely copies files in a folder. If you are experienced enough, you can download the smaller plain archive and extract it in a folder of your choice. To run x², just open the installation folder and d-click on the executable. To create a shortcut on Task Bar (and/or desktop), press **ALT+CTRL** and drag-n-drop the executable.

Note: The *first* time you run the *PRO* version on a PC, you must log on as an administrator. However, for subsequent updating, you need *not* have administrator rights.

This User Manual is not included in the installer. During installation, the Installer asks you if you want to download the manual. First ensure that you are connected to Internet and then select *Yes*. The manual will be automatically downloaded and integrated with x².

To manually integrate this manual with x², simply place it in the installation directory (i.e., the folder in which all x² files are placed. Usually this folder is **c:\program files\zabkat\explorer2**, unless you changed the path during installation). Now the manual will be launched when you press **F₁** or select the **Help | Contents** menu option (if the manual is not found in x²'s installation directory, x² will ask you if you want to download it from the website).

To register the Professional version:

If you are running x², first quit all its windows including **scrap containers**. Then start the program again and paste the registration key in the opening screen.

Updating x²

Although x² is already amongst the most powerful applications, it is still getting even more powerful features at a breath-taking pace!

Get the latest features, by downloading the latest update. This is very easy: just select the **Help | Check for updates** menu option. It will launch your web browser if needed, and take you directly to the download page.

Uninstalling x²

You can uninstall x² from your Control Panel. Click on **Add/Remove programs**, scroll down to find x² and click on **Remove**.

3. A look around x²

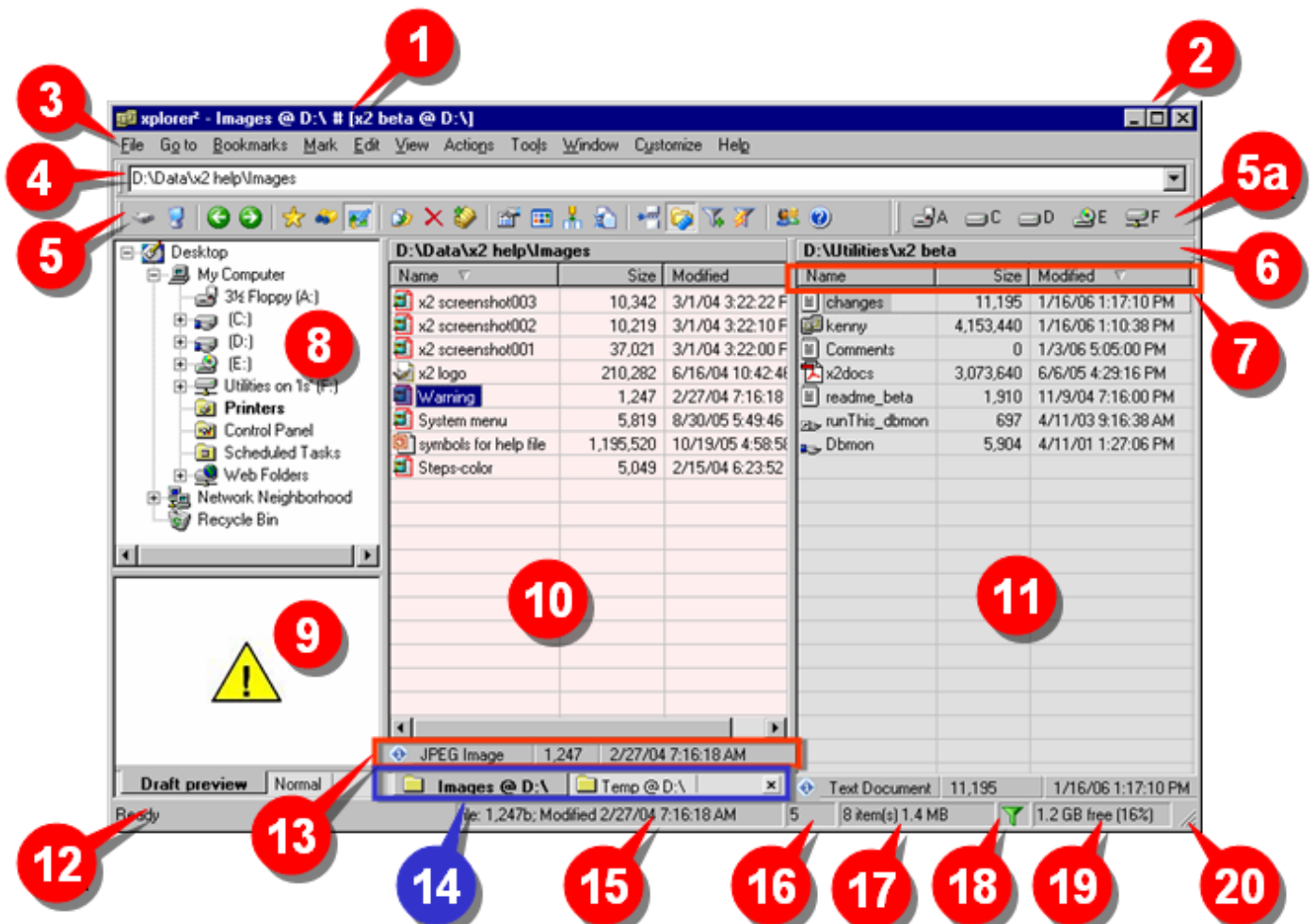
In this chapter, we will go around and have a look at x²'s screens to familiarize ourselves. In the next chapter, we will learn how to use these screens. In the subsequent chapters we will see how to use x² in day-to-day operations.

This is just like looking at the user's manual of a car to understand how the different parts look and how they work.

Main screen

The main screen of the application is shown below. Actually the screen can be configured in numerous different ways: this figure merely shows *one* of the possible configurations. We will see later how to change these configurations.

(A reminder: Hyperlinks in this manual appear in **brown** text!)



- Notes:**
1. The bottom row of the screen is known as **Status Bar**, which is split in six different sections (12, 15, 16, 17, 18 and 19). Each of these sections shows different status of the system.
 2. The entire toolbar area (4+5) is called “rebar”.

How different parts of the screen work

The **figure** shows the main screen of x². Major elements of the screen are numbered (in left-to-right and top-to-bottom order); and explained in brief in the table below.

Even if you don't get the whole idea, don't worry; because this is only an introduction: We will see detailed descriptions and uses of these elements in the next chapter. Experienced users can take a peek ahead by clicking on the hyperlinks provided in this table.

Note: When posting any queries (or asking for help) at the **User Forums**, please use these terms *exactly as given* in this table: If you use your own "home-grown" terms, others will have a hard time guessing your problem! Just imagine how *you* would feel if you spent a lot of time suggesting remedies for a cough to someone, only to realize much later that all the time he was talking about *kopf* ("head" in German).

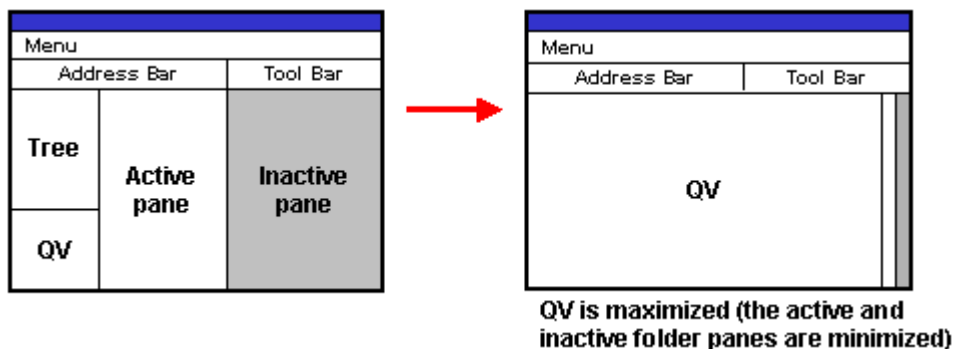
No.	Name	Remarks
1	Window bar	Shows the addresses of both folder panes (10 and 11), separated by a # symbol. The address of the inactive pane (11) is enclosed in square brackets []. Click on its left corner to see the <i>system</i> menu.
2	Window buttons	To minimize, maximize and close the window.
3	Menus	All functions of x ² are logically grouped in these pull-down menus.
4	Address Bar	Serves multiple functions: Shows the path of the item in the <i>active folder pane</i> (10). Enter a path here to load that folder in the active folder pane. You can apply filter conditions (e.g. *.pdf) here to hide certain items from view. You can also run DOS commands (e.g. dir, cd, rd, del) and Windows commands (e.g. net send, run) from here.
5	Toolbar	Contains buttons for commonly used commands. You can add or remove toolbars here. You can also add or remove buttons in the individual toolbars to suit your needs.
5a	Drive Bar	This is a special toolbar that contains shortcuts to all drives on the PC. All virtual drives and mapped drives are automatically added here.
6	Pane header	This is an integral part of <i>folder panes</i> (10 and 11). It shows you the path of the folder loaded in that pane. Click on any folder in the path displayed here to jump to it. R-click to jump to any previously visited folder (history). SHFT+r-click to see a list of all parent folders till the root.

No.	Name	Remarks
7	Column headers	These are also an integral part of <i>folder panes</i> (10 and 11). They are visible only when a pane is displayed in <i>details</i> style (other display styles are described on page 27). You can click on them to change the sorting order (ascending, descending, none). The sorting order (if any) is indicated with a triangle.
8	Tree pane	The tree pane shows the directory in a hierarchical fashion. It is shared between the two folder panes. It can be auto-synchronized with the active folder pane (10), so that it always highlights the folder loaded in the active folder pane.
9	QuickViewer	Shows a thumbnail of the focused item in the <i>active folder pane</i> (11). It can also preview audio/video and generic text/RTF files.
10	Left Folder Pane	<p>A folder pane shows the contents of one folder, including subfolders if any.</p> <p>You can also set the panes vertically, in which case they are called <i>Top/Bottom folder panes</i>.</p> <p>Any one of these two panes can be made <i>active</i>; which means that all commands <u>a</u>ct here. All user inputs are directed to it and all other user interface elements (toolbars, status bars etc) show information relevant to the active pane only.</p> <p>The opposite pane is called <i>inactive</i> pane. In some</p>
11	Right Folder Pane	<p>commands, the <i>inactive</i> pane plays a supportive role. The inactive pane is always grayed out to distinguish it from the active pane.</p> <p>In fact, each folder pane contains one or more Folder sheets, arranged in a stack (like <i>worksheets</i> in Excel). What you see in the Folder pane is actually the top folder sheet in this stack. <i>Unless otherwise stated, all operations in folder pane are carried out in this top folder sheet only.</i></p>
12	Status Bar	<p>Serves three major functions:</p> <ol style="list-style-type: none"> 1. It shows the current progress status of any command that is being executed. 2. If there are any errors, they are shown here for approximately 5 seconds. 3. It explains the function of the highlighted menu option. (Before selecting any menu option, check what it can do.)
13	Info Bar	Each folder pane has an independent Info Bar, which shows additional information about the item that is under <i>focus</i> in the folder pane. You can choose what information to display here.



No.	Name	Remarks
14	Tab Bar	<p>Contains the tabs for all folder sheets (which are displayed in the folder panes).</p> <ul style="list-style-type: none"> ➤ Each folder sheet has a tab that appears in the Tab Bar. A click on a tab brings its folder sheet to the top of the stack. ➤ Each folder pane has an independent Tab Bar. ➤ If the folder pane has a <i>single</i> folder sheet, x² hides the Tab Bar. (In the main screen, see the right-hand folder pane) In other words, the Tab Bar appears only when there are two or more tabs in it.
15	Status Bar	Shows the size and modified date of the file under focus.
16	Status Bar	This panel shows the current item's index number (counted from top of the active pane).
17	Status Bar	<p>This panel displays two different figures, depending on whether some items are selected in the active folder pane:</p> <ol style="list-style-type: none"> 1. When no items are selected, it shows the count of items in the active folder pane and the total size of <i>files</i> (It considers the size of subfolders only when the CTRL+D command is active.) 2. When a single item is selected in the active folder pane, the behavior of the status bar is same as described above. 3. When <i>two or more</i> items are selected in the active folder pane, its display changes to x: yy format, where x is the number of items selected and yy is the total size of selection. <ul style="list-style-type: none"> ➤ Normally yy does <i>not</i> include the size of selected folders; but if the CTRL+D command is active, sizes of the selected folders are also counted.
18	Filter indicator	Whenever a filter is <i>on</i> in the active pane, a green funnel symbol appears here. This is the indication that some items may be hidden.
19	Free space	Shows the free disk space available in the disk for the active pane. This display also shows the free space as percentage of the total disk space.
20	Window resize handle	Appears only when the x ² window is <i>not</i> maximized. Drag this corner to resize the window. (For that matter, you can drag any edge or corner of the window to resize it!)

Note that the **screenshot** shows dimensions that are typically used in actual practice. But you can resize any of the panes by dragging its border. For example, you can make the QuickViewer large enough to occupy almost the entire screen (say, for viewing a folder that contains multiple images).

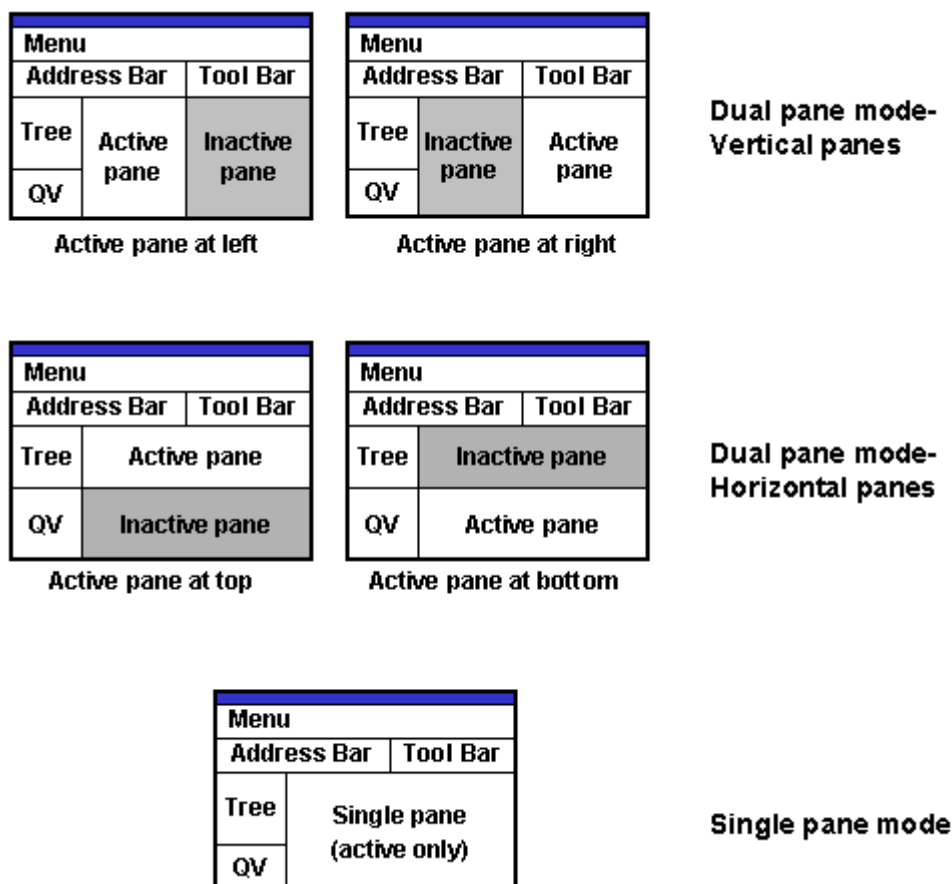


Although the screen is technically the same, its appearance changes dramatically.

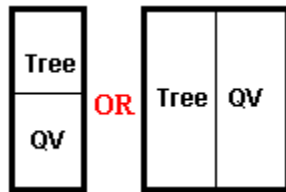
Configurations of x² screen

The **main screen** screenshot shows just *one* of the popular configurations: The x² window can be configured in many other ways, to suit individual taste and needs. To show these alternative configurations, we will use schematic diagrams rather than screenshots.

Schematic diagrams are easy to understand: compare the **main screen** figure with the first diagram in the figure below; which is its schematic equivalent.



Note that in *single folder pane* mode, x² resembles Windows Explorer. (But don't be fooled by appearances: even in this mode, x² has far more power than Explorer!)



The Tree and QV are usually stacked vertically. However, x² allows you to put them side-by-side. This arrangement provides more height to both. This is explained further in the **customization** section.

An important point to note is that each folder pane can be referred to in *two* different context:

1. Its position (*left/right or top/bottom*)
2. Its “activeness” (*active/inactive*).

Remember this, because while explaining different commands, we will make use of these terms.

The figure on the previous page explained the basic variations in x²'s configuration. The figure below shows even more variations by turning off several parts of the screen. Use the **View** menu to turn different parts on/off.

- Some users prefer to turn off the Tool Bar (which also turns off the Address Bar), Tree Pane and/or the Quick Viewer, to get the maximum possible space in folder panes.
- Even the Status Bar *can* be turned off; but since it displays vital information, we don't recommend it!

Note that any pane can be made *active* by focusing on it. (Either click in it or use **TAB** if your focus is elsewhere on the screen). In other words, you don't have to use x²'s program settings to make a pane *active*. Because of that, we don't consider different positions of the active pane as different *modes*. Therefore, the following figure shows the active and inactive panes randomly. Just ignore that aspect of these figures; and concentrate on how the x² screen can be set in so many different ways.

Menu		
Address Bar		Tool Bar
Tree	Active pane	Inactive pane

QV closed

Menu		
Address Bar		Tool Bar
QV	Active pane	Inactive pane

Folder Tree closed

Menu		
Address Bar		Tool Bar
Active pane		Inactive pane

Folder Tree and QV closed

Dual pane mode-
Vertical panes

Menu		
Address Bar		Tool Bar
Tree	Active pane	
	Inactive pane	

QV closed

Menu		
Address Bar		Tool Bar
QV	Inactive pane	
	Active pane	

Folder Tree closed

Menu		
Address Bar		Tool Bar
Inactive pane		
Active pane		

Folder Tree and QV closed

Dual pane mode-
Horizontal panes

Menu	
Tree	Single pane (active only)
QV	

Address Bar & Tool Bar
closed

Menu	
Tree (QV)	Single pane (active only)

Address Bar, Tool Bar
and QV/Tree closed

Menu	
Single pane (active only)	

Address Bar, Tool Bar,
Folder Tree & QV closed

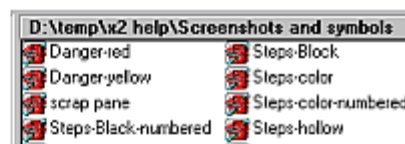
Single pane mode

Display styles of folder panes

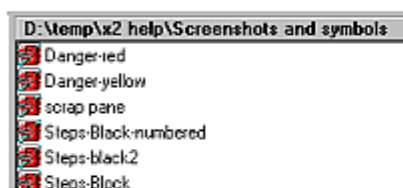
The folder panes (items 10 and 11 in the [screenshot](#)) have five distinct display styles, as shown below:



Large icons



Small icons



List

D:\temp\vx2 help\Screenshots and symbols		
Name	Size	Modified
Danger-red	1,739	2/27/04 7:15:12 AM
Danger-yellow	1,834	2/27/04 7:14:52 AM
scrap pane	35,036	1/31/04 4:37:50 PM
Steps-Block-numbered	3,805	2/15/04 6:28:10 PM
Steps-black2	3,525	2/15/04 6:22:32 PM

Details



Thumbnails

The *Details* style display can be further changed in the following manner:

- If you don't like to see the grid lines, you can turn them off.
- Depending upon your Windows flavor, x² can display up to thirty different columns (in fact, with Windows 2000 and XP, it can display even more columns if you install some column handler utilities, described in [chapter 8](#)). You can select which columns to show and which to hide. You can also decide the *order* in which these columns appear. For more details, see [chapter 7](#) (“Customizing x²”).
- You can change the *date format* (DDMMYY, MMDDYY, etc) of date-related fields (created date, last modified date, last accessed date) to your liking by changing the system-wide setting (the changes would be applicable to *all* applications, not just x²): Use the **Regional settings** option of the **Control Panel**. In the window that pops up, open the “Date” tab, and set the format.

You can set a different display style for each folder sheet.

Now which style is best? Simply try different styles and decide for yourself!

We can provide these tips, though:

- The *details* style is useful to see all details of the items. The example below shows only 3 columns, but you can choose from about 30 columns! Another advantage is you can sort on any column.
- The *thumbnails* style is useful to browse through images and HTML files.



Tip: You can even combine the benefits of both styles: load the same folder in both panes, and then set one pane to *details* style, and set the other pane to *thumbnails* style. Turn on the *Mirror scroll* mode (In this mode, when you focus on any item in the active pane, x² automatically scrolls to a matching item in the inactive pane.) Now you can see all details of the selected item in one pane, and the item's thumbnail in the opposite pane.

Viewing the items in groups

The items shown in the figure above are plain lists. In Windows XP, you can view the items in groups. Entries are easier to find in such grouped displays.

The figure below compares the simple display (left) with its equivalent grouped display (right). In this case, the items are grouped in “Last year” and “Long ago” groups.

D:\Temp		
Name	Size	Modified
Manual	16,995	6/7/2005 6:21:28 PM
trial	1,091,081	7/22/2004 11:42:26 ...
How x2 searches	27,648	4/21/2004 8:57:40 PM
symbols for help file	371,712	3/20/2004 4:36:12 PM
Building	1,508,475	12/23/2003 2:11:08 ...
How to use x2	113,931	7/6/2002 9:17:40 PM

D:\Temp		
Name	Size	Modified
Modified: Last year		
Manual	16,995	6/7/2005 6:21:28 PM
Modified: Long ago		
Building	1,508,475	12/23/2003 2:11:08 ...
How to use x2	113,931	7/6/2002 9:17:40 PM
How x2 searches	27,648	4/21/2004 8:57:40 PM
symbols for help file	371,712	3/20/2004 4:36:12 PM
trial	1,091,081	7/22/2004 11:42:26 ...

The groups are automatically created, based on the column on which the pane is *sorted*. (In other words, x² does not offer an independent control to create groups.) For example, in the figure above, the pane is sorted on the *Modified* date (notice the triangle on the *Modified* column). Therefore, groups are *also* created based on the same column.

Note the following:

- Although the groups themselves are sorted based on the sorting column (here, *Modified* date), the sorting does not extend to the items *inside* the groups: Within each group, the items are sorted *alphanumerically* by default (but you *can* sort them using a *secondary* sorting column, as described *later*).
- All *styles* except the **list** style support grouping.
- Grouping is turned off when the pane is sorted on the *Name* column. This is because the *Name* column would generate too many groups (A-Z), which is meaningless. Secondly, in some languages, groups cannot be created at all.

In general, a separate group is formed for each unique value found in the primary sorting column. However, there are two exceptions to this rule:

- Some items may have unspecified values in the sorting column. Such items are shown in a special group named “Unspecified”.
- In case of *Size* and date (*Created*, *Modified*, or *Accessed*) columns, groups are *not* based on unique values. Instead, special groups are used, as explained below:

Column	Groups	How defined-
Size	Tiny Small Medium Large Huge	≤ 25 kB > 25 kB, ≤ 250 kB > 250 kB, ≤ 1 MB > 1 MB, ≤ 10 MB > 10 MB
Dates (<i>Created</i> , <i>Modified</i> , or <i>Accessed</i>)	Today Yesterday This week Last week This month Last month This year Last year Long ago	Counted from midnight today This week, but before <i>yesterday</i> This month, but before <i>last week</i> This year, but not in last two months Before last year

Note the following:

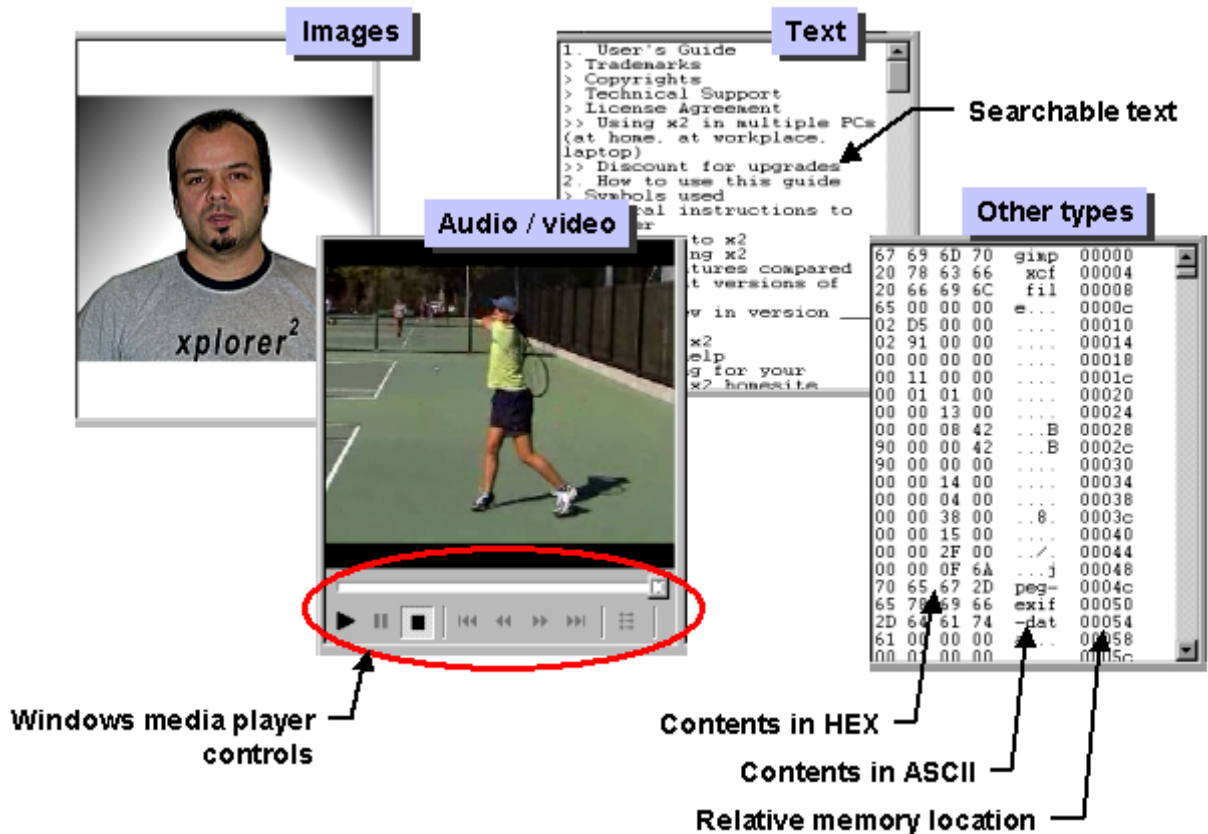
- The *week*, *month* and *year* are based on calendar; not count of days. For example, a *week* is not “past 7 days”.
- The *week* starts from Sunday.
- When we talk of “*This week*”, we understand that “*Today*” and “*Yesterday*” are integral part of it. But Windows handles them differently, as mutually exclusive groups. So, what is in *Today* and *Yesterday* will not be counted in *This week*.

Similarly, items counted in *This week* and *Last week* groups will not be included in *This month*. Similarly, *This year* group does not include items already counted in *This month* and *Last month* groups.

This has some peculiar results: If *today* is Sunday or Monday, you will not find the *This week* group in the display. You can see the *This Month* group only if *today* does not belong to the first two weeks of the month. Similarly, you will not see the *This year* group in January and February.

Display styles of QuickViewer

Like the folder panes, QuickViewer (item 9 in the [screenshot](#)) also has different styles to display different types of files. However, QuickViewer automatically sets its own style depending upon the file under focus. In other words, the display style of QuickViewer is not user-settable.



However, for certain file types, the display *can* be changed (slightly), using the QuickViewer's context menu. Further, if you have installed some filter applications, the display changes for certain file types. For more details, see the "Using QuickViewer" section.

The pane background

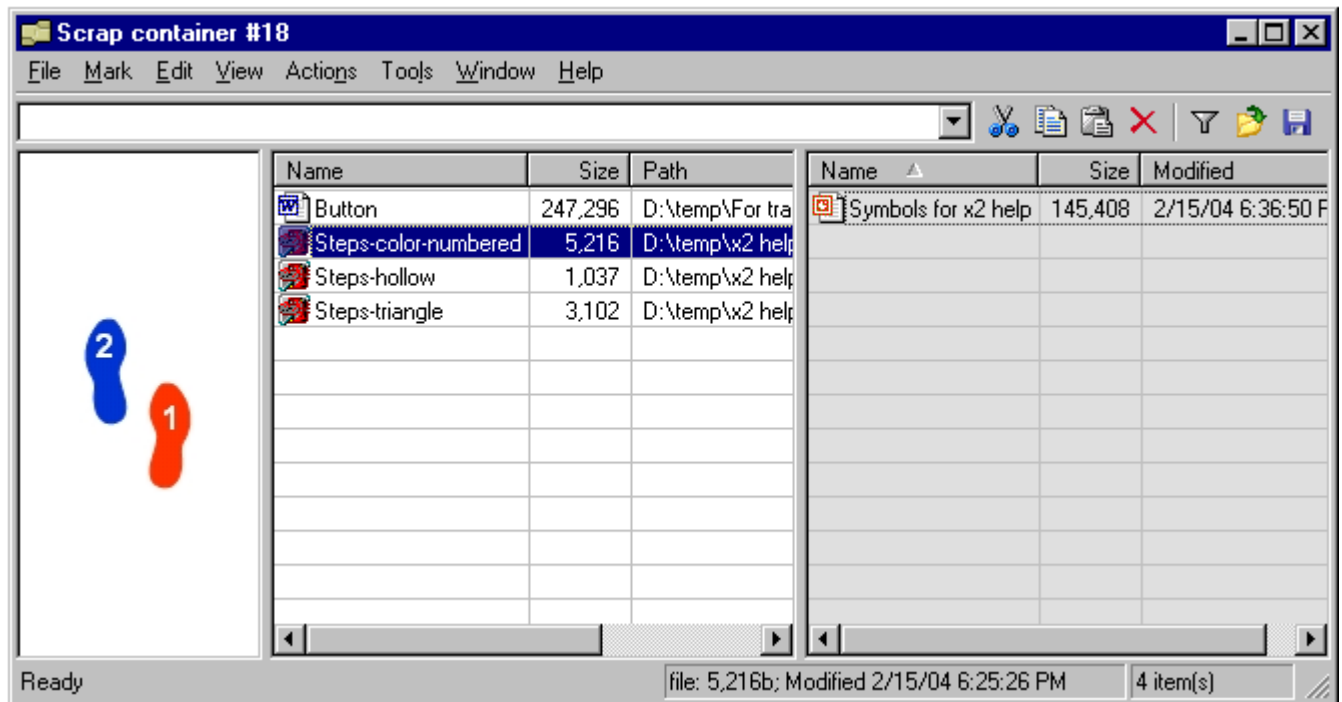
Look at the **display styles figure** again; especially the *Thumbnail* style shown at the bottom. Note the "blank space" surrounding each thumbnail. We will call this area "*background*". This area provides some very important functions through context menus (see **Appendix 9F** for details).

Depending upon the display style, the "background" takes different forms:

- Empty space below the items' list (in all styles)
- Empty space to the right of the items' list (in all styles)
- Empty space surrounding each item (in all styles except *Details* style)

Scrap Containers

A *scrap container* is a dual-pane "catch-all" storage area where you can store files and folders temporarily (see the figure below).



Note: The name **scrap container** is inspired by *scraps book*, which is used to store randomly collected *scraps* of information. Do not confuse it with a garbage can!

A scrap container has several powerful uses:

- **Collect items** from various places (including NN PCs) and optionally save these lists.
- **Flatten** a complex folder system (contents of the folder and all its subfolders are recursively shown in a single, flat list)
- Hold results of **search** operations. Save the results if necessary.
- Search **within previous search results**.
- **Re-organize** your collection (copy/move your files and folders to new locations)
- Check for **duplicates** (and optionally delete the duplicates)
- **Compare** two separate collections, and if required, synchronize them (i.e., bring them to the same status)

You can launch a scrap container manually, using **Window | Scrap container** menu option. As we shall see later, x² automatically launches scrap containers when some commands need them.

Scrap container is a *virtual* container—when you put any item in it, it does not actually create a separate copy of the original item, but only shows you an “image” of that item. When you rename, move or delete that image, x² renames, moves or deletes the *original* item.

Because a scrap container contains only *images* (and not full replicas of the real items), it occupies only a fraction of the disk space as compared to the original items it points at.

x² allows you to open unlimited number of scrap containers simultaneously.

We will learn about this extremely powerful feature in the next chapter. For now, look at its screen (see the figure above).

Structurally, the scrap container screen is exactly like the **main screen** of x^2 , except the following:

1. The toolbar is *slightly* different (see **Appendix 9D** for details)
2. The **Tree Pane** is not provided here.
3. It does not have a **TAB Bar** (the panes don't have tabbed sheets)
4. Instead of the *folder* panes of x^2 , we have *scrap* panes here. The difference is that the scrap panes do not contain items from only one single folder, as in case of the folder panes. Therefore, the scrap panes do not need a **pane header** (because they neither have a “history” nor a folder path to be displayed)

Subject to these differences, a scrap container's screen can be configured in exactly the same way as the main screen of x^2 . So, except for the figure above, we will not repeat the other figures.

- In the later chapters, we will be talking about moving selections between *folder panes* (part of an x^2 screen) and *scrap panes* (part of a scrap container). Keep in mind that several copies of x^2 and scrap containers may be running at any time. You must ensure that the selection lands in the correct pane of the correct scrap container.

Other windows

x^2 also has many other windows and wizards that pop up when you execute different commands. We will learn about them in the subsequent chapters.

4. Basic operations with x²

In this chapter, you will learn how to set x² GUI in different configurations, and then how to use its various parts.

These commands are *not* for managing files and folders, but still essential for you.

This is like basic skills required in car-driving: before you can take your car on the road, you *must* first learn how to release the clutch smoothly and apply the brakes safely!

Adjusting the x² layout for working comfortably

In our car analogy, even before you tackle the brake and clutch, you must first make yourself comfortable: adjust your seat, tilt the mirrors to suit your height, fasten your seat belt, and so on.

Similarly, before starting work with x², it is important to be comfortable with its GUI. Therefore, we will first see how to alter x²'s layout.

Have a look at the layout figures (main screen, and display styles for the folder panes) in the last chapter again, and decide if you liked a certain layout better than the others; and then use the commands described below to set x² in that layout.

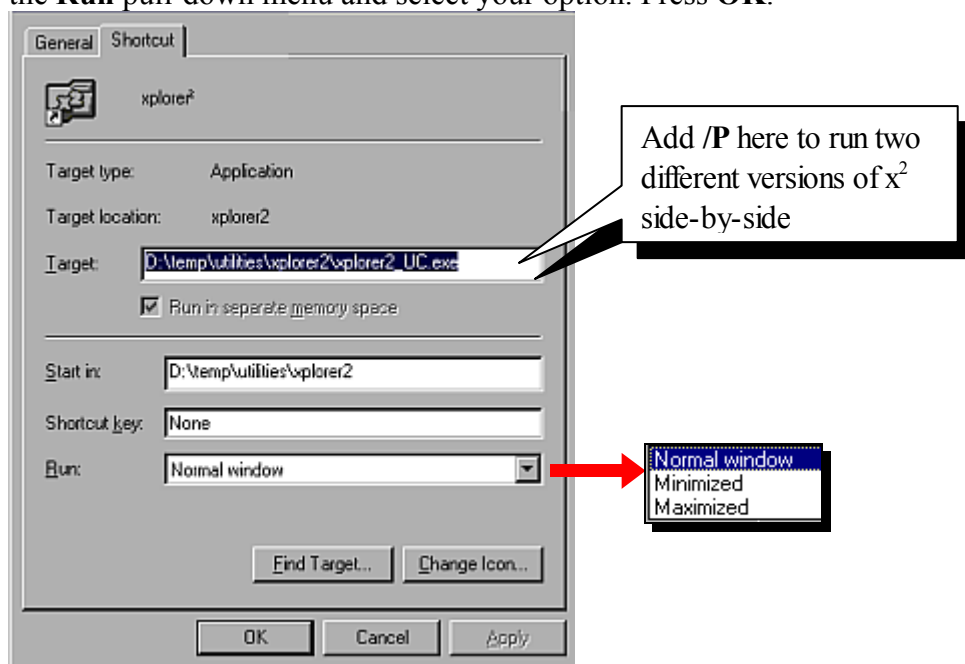
- The changes take effect immediately: You do not have to restart x² (or the PC)
- Once set, x² will remember the new layout: you do not have to set the layout the next time you launch x² or restart the PC.
- If you have multiple copies of x² running on your PC, changing any options will affect only the current copy and also any copy launched thereafter. However, other copies that are already running will not be affected.
- Layouts of x² and scrap containers have to be set separately.
- Each layout can be further modified by dragging the borders between different elements of the screen. You can resize the Address Bar, folder panes, tree pane, and the Quickviewer this way.
 - If you d-click on a border, it jumps to the mid-point of the available height/width. For example, if you want to make both folder panes of equal width (when they are tiled vertically), then d-click on the border between them.

Setting the default window size when x² starts

You can control the size of the default window whenever x² starts. There are three options:

Option	How x ² window appears when you start it
Maximized	The x ² window occupies the whole monitor screen.
Minimized	As soon as x ² is started, its window is minimized. You have to click on the x ² 's button on the taskbar (at the bottom of the screen) to see the x ² window
Normal window	In this option, you can precisely control the window's size and position on the screen when x ² starts. In fact, they are carried over from one session to the next: when you close x ² , the windows size and position are remembered and re-used in the next session.

To set the starting mode, r-click on the x²'s shortcut (in the Quick Launch Bar or the Desktop). From the context menu that appears, select **Properties** option. A window pops up as shown below. As shown in the figure, click on the **Run** pull-down menu and select your option. Press **OK**.



Note that this method is *not* unique to x²: it is applicable to all applications running on Microsoft Windows.



Tip for non-English users: If you want to run the English version of x² side by side with your own Language version, add **/P** in its **Target** field as shown above.

Changing orientation of folder panes

Here are the method to set the folder panes in horizontal /vertical tiles:

1. Select the **Tools | Options** menu option.
2. Click on the **Windows** tab
3. Select the desired option in **Dual pane alignment (tiling)**


Turning off different parts of the x² window

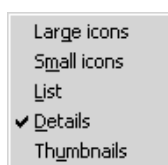
Here are the commands to turn off different parts of the **GUI**:

Desired Effect	Command	Equivalent Menu
Toggle tree pane	CTRL+T	View Show tree
Toggle the Quickviewer on/off	CTRL+Q	View QuickViewer
Toggle AddressBar on/off		View Toolbars AddressBar
Toggle Tool bar on/off		View Toolbars Tool bar
Toggle Status Bar on/off <i>Not recommended!**</i>		View Toolbars Status bar
Toggle all toolbars on/off (This control does <i>not</i> override the settings of individual element)		View Toolbars All toolbars

**** Note:** Rather than turning off the *entire* Status Bar, turn off its different parts, using the **Tools | Options | Advanced** menu **option**.

Changing display styles in folder sheets

Press the  button on the toolbar, or press the **ALT+CTRL+V** keyboard shortcut (or use the **View | Pane style** menu option) .



A small list of **styles** pops up as shown on the left. In this list, a tick is shown against the currently applied style. Select the new desired style, which will be applied to the folder sheet immediately.

- Display style for each folder sheet is set independently: The other folder sheets in the folder pane are not affected.
- When you turn off a pane (with **CTRL+O** command), its layout settings are unaffected: When you turn it on again, it retains its style.

Deciding which columns to display (in *Details* style)

As discussed in the last chapter, the folder panes have a **Details display style**, where you can view the properties of items in **columns**.

In this mode, you can adjust the display in the following ways:

- Add columns to the display
- Remove columns from the display
- Change the order in which these columns appear.

To organize the displayed columns, press **ALT+K** (or use the **View | Select columns** menu option). A column organizer window pops up, as shown in **Appendix 9R**.

Note that each folder sheet has independent display settings; so you can

choose a different set of columns for each folder sheet.

Note: You can organize the columns in a **scrap pane** in a similar way, but you can do so only *after* you have loaded some items in it: A blank scrap pane does not display columns, so you can't organize them!

Setting the window on top

In Windows, the active application's window comes to the top. But sometimes, you want to keep the x² window on top, even when you have switched to other application. To do this, click on the left top corner of the x²'s **GUI** (or r-click anywhere on the window's top bar). A context menu appears. Select the **Topmost** option.

Topmost

To turn off the *topmost* mode, repeat the process. (The **Topmost** menu option actually toggles the *topmost* mode on/off.)

This facility is also available in **scrap containers**.



Caution: *Do not use "Topmost" feature when the window is maximized; otherwise you will not be able to see any other window, including the other applications or even dialog boxes launched by x² itself!*

Special display settings for particular folders

Generally, a folder/scrap pane's settings (pane style, columns and sorting order) are set only once, and x² remembers these settings. All folders loaded in the pane are displayed with this setting.

However, you can customize and save these settings for specific folder(s). (You can save settings for an unlimited number of folders.) When you load such a folder, x² automatically displays it using its saved settings.

Let us see a typical example: You generally prefer to view all your folders in the *Details* style, but you have stored photos in a particular folder, and therefore you want to always view this particular folder in *Thumbnail* style.

Following are the commands to be used for this purpose:

Menu	Result
Actions Folder settings Save	Save all settings for the current folder in the active pane. Now onwards, whenever you view this folder, its settings will override the default settings for the pane. (But all <i>other</i> folders will still be displayed with the default settings of the pane)
Actions Folder settings Clear	Clear (reset) all settings for the folder displayed in the active pane. From now on, this folder will be displayed with the default settings of the active pane.
Actions Folder settings Suspend	Do not reset the settings of this folder; but for the time being, display it using the default settings of the active pane. Select this menu option again to terminate the suspension. (After that, the folder's special display settings are applied again).

Using Menus

All functions of x² are organized in its pull-down menus. Menus are accessible through both mouse and keyboard (or a combination of these). Refer to **Appendix 9D** for a complete list of menu commands.

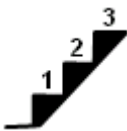
Navigating through menus with mouse



1. Click on the menu header (**File**, **Go To**, etc)
2. In the pull-down list that appears, locate your option and click on it.

Tip: You can reach any menu command with a *single* click: After clicking on the menu header, slide the mouse around *without* releasing the LMB. When the mouse moves over the header of any menu, that menu is pulled down. This way, you can open up all menus (one by one) with just a single click. Reach the desired menu, go down to the desired option, and release the LMB.

Navigating through menus with keyboard



1. Each menu header contains an underlined letter. Press **ALT** with the key for that letter (Example: In the **Actions** menu, the letter “n” is underlined. So, to open this menu, press **ALT+N**).
2. In the pull-down list that appears, select your desired option using any of these methods:
 - Use **UpArrow** and **DownArrow** keys to highlight the desired option, and press **Enter**
 - Press the hotkey combination indicated opposite that option.
 - Press the underlined letter key (but do *not* press the **ALT** key this time).
3. Instead of selecting an option in the pulled-down menu, you also have the following options:
 - If you feel that you are in the wrong menu, you can always press **LeftArrow** or **RightArrow** key to switch to a neighboring menu. These keys cycle through all the menus (when you reach the end of the menus, the focus jumps to the menu at other end).
 - Press **Esc** to abort. The pulled down menus will disappear.

Using Address Bar

Address Bar is common between the two folder panes.

Functions of Address Bar

The address bar has four major functions:

1. The address bar always shows the folder currently open in the active folder pane.
 - The drop-down portion of the folder address selection combo box lists the names of the folders that have been recently visited. This allows rapid switching backwards and forwards between folders, if

need be. This list is shared between both folder panes.

To go to any folder (including any folder on a remote drive or a FTP server), just enter its address (path) here, and that folder will be loaded in the active pane.



Tips:

1	x ² accepts both absolute and relative paths, including any combinations of the parent ("..") and root ("\") folder specifiers.
2	If you include the filename in the path, x ² not only loads the folder in the active folder pane, but also selects the specified file at the same time.
3.	To access an FTP site, enter the URL and all your details directly in the Address Bar using the following format: ftp://username:password@ftpsite.com Note: Characters in red are literals (enter them exactly as shown). Substitute the rest with your own details.



Warning: *This method is suitable only for lightweight FTP users, because your passwords will be stored unencrypted in the registry.*

You can execute DOS and 32-bit Windows commands by typing them in the address bar. (There is no need to launch the “DOS” or “RUN..” windows from the Windows’ START menu.)



Tips:

1.	You have to begin the DOS commands begin with the '\$' character and Windows commands with the '>' character. This sets them apart from local addresses, which begin with the drive letter; and NN addresses, which begin with a “\\” symbol followed by the PC name.
2	Compiling of argument lists is simple: you can copy the filenames from the active pane directly into the address bar, by selecting multiple files and then CTRL+Enter to transfer them.
3	Environmental variables like %WINDIR% can be used as part of the commands — these are automatically expanded by x ² .
4	DOS commands are not supported for UNC paths in the form //computer/share . If you want to execute a \$-prompted command on a remote computer, you must first map the network drive onto a local drive letter like F:\ .

You can apply visual filters directly from the address bar. Just click in the Address Bar and add the filter condition at the end of the path.

For example, if you are in folder **D:\aaa\bbb** and you want to see only pdf files.

1. Click in the Address Bar and complete the filter condition:
D:\aaa\bbb*.pdf (do not forget to add the “\” after **bbb**)
2. Press **Enter**. (The filter takes effect only after you press **Enter**.)

*To turn off this filter (i.e., to see all files again), press **CTRL+J** or type a single ***** in the Address Bar.*

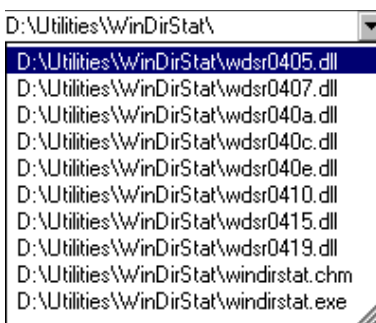
Autocompletion

The Address Bar —indeed, all fields in x² dialogs meant for paths— support *path autocompletion*.

In short, the *autocompletion* feature works like this: you have to enter only a part of the path and press a key. x² will find all possible matching paths. You can cycle through these choices. When you find the path you want, press **Enter** to load the path in the **active folder pane**.

In fact, x² offers you *three* different autocompletion mechanisms:

1. Explorer-style Autocompletion



In this mode, as soon as you type part of a path, x² pops up a list of all items that match this partial path. The list includes subfolders and files. Use **UpArrow** and **DownArrow** to browse the list. Press **Enter** to load the folder in the **active folder pane**.

- To go one level down in the folder, you will have to add a backslash (\) to the path and repeat the entire process.
- If any folder is hidden, it will not be listed even if you type part of its name: You will have to type its *entire* path in the Address Bar.
- You can resize the list window by dragging its right-hand bottom corner. This is useful to prevent it from covering up x²'s **GUI**.

To enable this mode, select the menu option **Tools | Options**. In the **window** that pops up, select **Advanced** tab. Put a tick in the **Explorer-style path autocompletion in Address bar** checkbox.

You will have to close and restart x² for this setting to take effect.

The main problem with this mode is that the list keeps popping up constantly, and covers part of the main x² **GUI**. If you do not want that, you can opt for the alternative mode described below, which shows all matching entries one by one, *within* the Address Bar. (But the flip side is that you have to press **F1** to see each matching entry.)

2. Using the F₁ key

The folder you are browsing may have a lot of subfolders, making it difficult to navigate to a particular subfolder. You can use the **F₁** key in Address Bar to limit the number of subfolders.

Enter the path for any folder and press **F₁**. Optionally, enter a few beginning letters from the subfolder's name. x² takes the entered string and look for matching subfolders *within the current path*. It will display the first match in the Address Bar. If you press **F₁** again, you will get the second match. If you keep pressing the **F₁** key, x² recycles through the list of matching paths indefinitely.

For example, assume that your **D:** drive has a lot of folders, but you are interested in a testing-related folder. Assume that you have the following folders on this subject:

D:\Test plans
D:\Test strategy
D:\Tutorials on testing

Now if you enter *D:\tes* in the Address Bar and press **F₁**, x² will load the first match (D:\Test plans) in the Address Bar. Press **F₁** again to get the next match (D:\test strategy) in the Address Bar. Since only these two folders match the entered string, if you press **F₁** now, the list will repeat.

Note that the folder **Tutorials on testing** will not be listed, because it does not match your string. To use the **F₁** key unerringly, you have to be pretty familiar with your folders.

When you find the desired folder, you have two choices:

- Press **Enter**. This loads that folder in the active folder pane, and switches the focus to folder pane. Further navigation is left to you.
- You can continue searching the remaining segments of the path (i.e., for lower-level folders in that branch of the tree): add a backslash (\) and repeat the entire process.

Note: In case of **NN** paths, you will have to enter the PC name and the shared folder name. Use **\\PCName\SharedFolderName** format. The **F₁** command cannot auto-complete PC names or shared folders: only folders below this level are found.

Tip: Unlike the **Explorer-style autocompletion**, this option includes the hidden folders in the list.



3. Using the UpArrow key

This trick allows you to rapidly go to a location that you have already visited in the past. You have to remember at least *some* part of that path.

Enter that string in the Address Bar and press **UpArrow**. x² shows paths that contain the desired string. (If there is no response, it means there are no matching paths.)

- If there are more than one matches, you can see the other matching entries by pressing **UpArrow** and **DownArrow**.
- Unlike the **F₁** trick, x² does not cycle through the list endlessly: it will stop at the top and bottom of the list.

When you find the desired path, press **Enter** to load that path in the Address Bar (and active folder pane)

Comparison of the autocompletion methods

The three mechanisms are compared below:

	Method of autocompletion		
	Explorer-style	Using the F ₁ key	Using the UpArrow key
Searches for matches within-	All subfolders of the given folder	All subfolders of the given folder	Only items listed in history (i.e., entries found in the pull-down list)
Past visit to the target folder necessary?	No	No	Yes
Requires you to enter-	<i>Starting</i> part of the path	<i>Starting</i> part of the path	<i>Any</i> part of the path (even from the middle)
Partial entries accepted?	Yes (but only the tail-end of the path can be omitted)	Yes (but only the tail-end of the path can be omitted)	Yes
Returns the complete path?	Yes (pops up a list of all matching items)	No: it only reveals a single (lower) level of the path.	Yes
Hidden folders displayed?	No (unless you type the entire path)	Yes	Yes (if you have visited it in the current session)

Using Toolbars

Some often-used commands are available as buttons in the toolbars. Click on these buttons to execute these commands. **Appendix 9D** describes all commands available through the toolbars.



Tip: When you start x² for the first time, you will see only the most-often used buttons in the toolbar. You can select more buttons and change their position in the toolbar by **customizing the toolbar**.

Some buttons can execute an additional command when you press a specified key such as **SHIFT** or **CTRL** (called “*modifier key*”) on the keyboard while you click on the button.



Tip: When you hover your mouse over any button, its name is shown in a small tooltip. At the same time, the status bar (at the bottom of the screen) displays its function in more detail. If the button can execute any additional function with a modifier key, this additional function and the modifier key are also identified there.

The Drive Bar

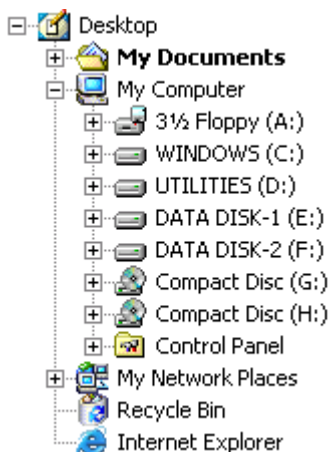


This is a special toolbar, which shows all drives available on your PC.

All virtual drives (e.g. the drives created by **Alcohol 120%**) and mapped drives from the **NN** are automatically added to this toolbar.

Note the difference in symbols for floppy drive, fixed disks and network (mapped) drives and the virtual drives.

Note: Unlike the other toolbar buttons, the Drive Bar buttons do not show tooltips. However, you can see the description of each drive in the **Status Bar**.



Using Tree pane

The main use of the tree pane are:

1. Quick survey of the folder hierarchy and navigation
 - View the folder hierarchy, including folders on **NN** PCs
 - Click on any desired node to load it in the active folder pane
 - ALT+Click on any node to load it in the *inactive* folder pane
 - Open up a particular branch and see its layout.
2. Special operations through context menu (r-click on the desired node)
 - Ejecting a CD
 - Formatting a hard-drive or a floppy
 - Scanning for virus



Tip: The tree has many different types of nodes (folder, drive, computer, printer, control panel, recycle bin, registry, etc). You will see a different context menu for each type of node. Further, many software you install change the options available in these context menus.

Note that the Tree Pane has the following limitations:

1. It does not auto-refresh the sharing status of any nodes: it will reflect the new status only when you collapse and then expand a higher-order node. For example, if you have removed (or added) the sharing from a disk or a folder, the new sharing status will not be reflected in the tree until you pick any parent node, collapse it (click on the [-] symbol on its left) and then expand it again (click on the [+] symbol on its left).
2. Normally, you cannot delete folders from tree: x² will report a sharing violation and will not allow deletion. Use folder panes for deletions.

You *can* change the **program options** and delete folders in the Tree. But there is a downside: for entering DOS commands in the Address Bar, you will have to enter the entire path of the files. (Normally x² picks up the path from the active pane.)

However, this will be of concern only if you launch DOS commands from the Address Bar.

Navigating in tree pane

Navigating the tree with mouse is very simple:

- Click on any [+] sign to the left of any node to expand it (i.e., to display its next-level nodes). The [+] sign immediately changes to [-].
- Click on [-] to collapse the node (i.e., hide all its next-level nodes). The [-] sign immediately changes to [+].

To navigate the tree with the keyboard, use the following keys.

Key	Function
UpArrow	Go to the next node displayed above the current node. ➤ It does not affect any collapsed nodes.
DownArrow	Go to the next node displayed below the current node. ➤ It does not affect any collapsed nodes.
LeftArrow	<ul style="list-style-type: none"> ➤ If the current node is expanded or exploded, LeftArrow collapses it. The focus <i>remains</i> on the same node. ➤ If the current node is already collapsed (or does not have any subnodes), then the focus jumps to current node's parent node.
RightArrow	<ul style="list-style-type: none"> ➤ If the current node is collapsed, the RightArrow expands it by one level. The focus <i>remains</i> on the same node. ➤ If the current node is expanded or exploded, RightArrow goes one level down in the first

Key	Function
	branch.
PageUp	Jumps upwards by a screenful
PageDown	Jumps downwards by a screenful
Home	Jumps to the top of the tree (usually the Desktop node)
End	Jumps to the last node of the tree (usually the Recycle Bin node)



Tip: If you want to “explode” any node (i.e., see *all* the subordinate nodes in that particular branch) highlight it first and then press **ALT+RightArrow**. Exploding a node saves a lot of time, because you don’t have to open individual sub-nodes.

Using Folder pane

Most operations on files and folders are done in the folder panes. Some operations (such as deleting a file) can be carried out in a single pane, while others (such as copying a file) require both panes.

Folder panes have three major parts: pane headers, column headers and pane area. Each part serves several functions, as described below:

Pane Headers

Pane Headers have three basic functions:

1. Show the full path of the folder loaded in the pane.
2. Allow user to jump to any of the parent folder in the path
3. Allow user to browse any of the recently visited folders

Let us see each function in detail:

Path display

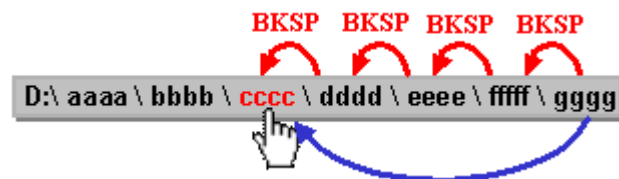
Generally, the pane header shows the entire path of the folder loaded in the folder pane.

- If the path is too long, it will not fit in the folder pane header. x² solves this problem by removing a part in the middle to accommodate it within the available width (x² shows “...” in place of the missing part).

Jumping to any parent folder

Simply l-click on any part of the path to directly jump to any of the parent folders. In Windows 2000 and later, the mouse pointer changes to a “pointing hand” and the subpath under the pointer changes color as shown below.

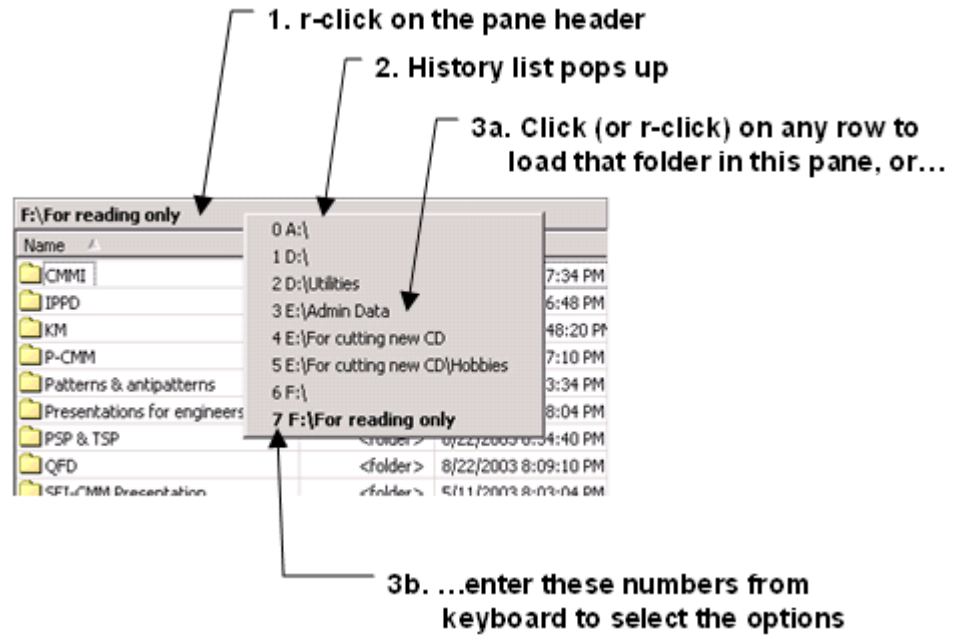
In the following example, folder **gggg** is currently loaded in the folder pane. To go four levels up (to folder **cccc**), click on the **cccc** subpath on the header. (You don’t have to press **BKSP** four times to reach there.)



If you press **ALT** while clicking, the folder will open in the *opposite* pane.

Browsing recently visited folders (History chain)

If you r-click on the headers, a list of recently visited folders (called “History Navigation Chain”) pops up, as shown below. To jump to any of these folders, either click on it, or press the number shown to the left of each folder (0 to 9).



Tip: If you want to save a click, after r-clicking on the list, *without releasing the RMB* slide the mouse pointer to the desired row and then release the RMB.

Sometimes, your path is so long that the pane header is unable to show it fully (either because your directory is very deep, or the folder names are too long). In such cases, x² truncates the path and inserts “...” as shown below:

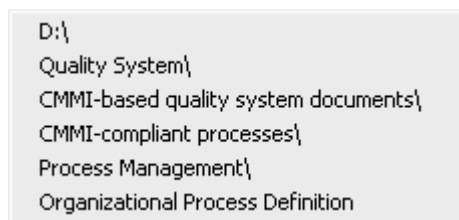
D:\...mpliant processes\Process Management\Organizational Process Definition

Although the truncation accommodates the path in the available length, it also presents two problems:

1. More than one parent folders could be replaced by the “...” symbol. It is not possible to jump to a folder within this span by clicking there.
2. The name of the first folder after the “...” is truncated, and is difficult to read.

To solve these issues, x² provides another mechanism: **SHIFT + r-click** on the header. A window pops up, showing all the parents of the current folder up to the root of the current directory. You can jump directly to any of the listed folders by clicking on it.

In our example, a **SHIFT + r-click** on the folder pane header produced this list:



Compare this list with the truncated display in the previous figure:

- Two of the parent folders (*Quality system* and *CMMI-based quality system documents*) were missing in the header display. Now they are

accessible.

- The name of a third folder (*CMMI-compliant processes*) was partially hidden. Now it is displayed fully.



Tip: If you want to save a click, after r-clicking on the list, *without releasing the RMB* slide the mouse pointer to the desired row and then release the RMB.

x² uses a sophisticated algorithm to maintain the history chain. Compared to Windows Explorer, x²'s history chain has three major advantages:

- If the target folder is not found (because it was renamed or deleted), then the link is removed automatically from the list. So, when you use the history next time, you will not see a dead link.
- Even if you visit the same folder multiple times, the History chain will keep only the latest record: Duplicate instances are automatically eliminated. This simplifies the history chain.
- In Windows Explorer, when you jump to a new location from the middle of the history chain, *all* the locations in the “Back” direction are lost, and only locations in the “Forward” directions are retained. If you had jumped from a forward location, almost the entire history chain is lost! In x², there is no such amnesia: *all* locations in the history chain are retained.

Refer to **Appendix 9G** to understand how history navigation chain works.

Column headers

The column headers appear only when the pane is in the *Details* style. (In other words, they are not displayed when the folder panes are in *large icons*, *small icons*, *list* and *thumbnail* styles.)

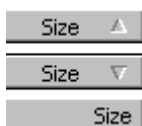
The column headers have three functions:

1. **Sort the items** in ascending or descending order
2. Set the **width of columns**
3. **Change the order** in which the columns appear

These functions are explained below:

Sorting items

Click on a column header to toggle sorting direction. There are three possible sorting states: “ascending”, “descending” and “unsorted”. When a column is sorted, a triangle in its column header indicates the sorting direction: It points upwards for “ascending” order and downwards for “descending” order. (Absence of a triangle means that the pane is sorted on some other column.)



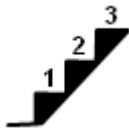
- The default direction is “descending” for date fields and “ascending” for all other columns.
- If you want to rename multiple items in a folder pane, an automatic sorting may create a problem, because as soon as you rename an item, it finds its new sorting position and jumps away. Keeping the column in “unsorted” order is useful in such cases.
- The default sorting order is *lexicographic* (file1, **file10**, file2, **file20**, file3...); but you can set it to *numerical* (e.g. file1, file2, file3,, **file10**, file11,..., **file20**) (Windows XP-style) by changing the

program options.

- Note that you can sort the items even *without* the column headers, using two other sorting mechanisms accessible from the **pane area**.
- When the items are **grouped**, the display behaves in a different way:
 - The primary column creates the groups, which appear in a fixed sequence (the order cannot be changed in *ascending* or *descending*)
 - Items *within* a group are not sorted by the same column: They remain sorted by name, in ascending order.

Multi-way sorting (nested sorting, sort-within-sort)

Sometimes, you may want to carry out *nested* sorting (also known as “sort-within-sort”). To do this,



1. Decide the sequence of your sorting (e.g. First *Path*, then *Name*, then *Modified date*).
2. Click on the first column header (in this case, *Path*) to set the sorting as desired. (This column is called the “*primary* sorting column”; and the other sorting columns are called the “*secondary* sorting columns”).
 - When the items are **grouped**, the primary column creates the groups, which appear in a fixed sequence (the groups' order cannot be changed in *ascending* or *descending*)
3. Next, press **SHIFT** and click on the second column header that is in the order (In this case, *Name*). If you want, click to toggle between *ascending* and *descending* orders. (Keep **SHIFT** pressed while doing this.)
 - When the items are **grouped**, items within a group can be sorted by the secondary sorting column: You can also apply *ascending* or *descending* order by the secondary column..
4. Repeat step 3 with all the other column headers.

All the sorted column headers will display the sorting order with triangles.

To cancel the sorting, click on any column header *without* holding **SHIFT**.

This sorting is semi-permanent: If you close the tab, folder pane or x², the secondary sorting will be lost, and the sorting order reverts to the first column that was selected in the sequence (in this case, *Path*.)

Changing column width

To change the width of columns, follow one of the following tricks:



- Drag the right-side border of any column header to set its width
- D-click the right-side border of any column header to set the width of that column to the longest entry in the column.

Tip: Rather than adjusting the width of each column separately, you can adjust the width of *all* columns in one stroke: While the focus is in the folder pane, press **CTRL+Gray+** (or use the **View | Autosize columns** menu option). The width of all columns will be automatically adjusted to the longest entry in each column. On the other hand, if you want to fit all columns to the text in headers, press **SHIFT+CTRL+Gray+**.

Changing the display order of columns

You may want to change the order of the column for two reasons:

1. The **incremental search** (described later) works only on the left-most column.
2. Before copying the column data for **taking a print**, customize the order of columns suitably.

To shift a column to a new position, drag-n-drop its header laterally to desired position.

- In the example below, the **Path** column is being dragged (note that a faint image of the **Path** column moves with the mouse pointer). Also note that the *edge* between the column headers of the **Name** and **Size** columns (encircled in red) is **darkened**, which indicates that if you release the LMB, the **Path** column will be inserted at that place.

Name	Path	Size	Modified	▼
UserManualv1.2.0.0		4,989,952	03/07/05 1:41:54 PM	

Pane area

The pane area displays the contents of a folder (including its subfolders) in different **styles**. The results of all x² operations are seen here.

In this section, we will see how to navigate in this area, followed by how to hide some items from view so that the pane looks uncluttered.

Keep in mind that if you r-click in the “**background**” area, you get a context menu that offers multiple options. See **Appendix 9F** for details.

Sorting items using keyboard shortcuts and context menu

We saw that when the pane area is in *Details style*, you can sort the items by clicking on the **column headers**. However, when the pane is displayed in other styles, column headers are not visible. Even then, sorting is possible by using keyboard shortcuts and context menu.

The following keyboard shortcuts are available for sorting:

Shortcut	Sorts on-
CTRL+ALT+N	Name of items.
CTRL+ALT+S	Size of items. Note: When the CTRL+D command is active, all folders are also sorted like files.
CTRL+ALT+D	Modified date
CTRL+ALT+T	Type
CTRL+ALT+U	The <i>Unsorted</i> order: x ² reads the items from the disk and displays them in their natural order.
CTRL+ALT+A	Toggles the sorting order between <i>ascending</i> and <i>descending</i> .

Note that sorting shortcuts are provided for four most popular columns. If you want to sort on other columns, you will have switch to *Details* style first, add the desired column using the **column organizer**, click on that column's header to sort all items on this column.

➤ After sorting, you may *remove* the column on which you have sorted; or even switch to any other style. This will NOT affect the sorting order.

To sort the items using the context menu, r-click in the pane area. From the context menu that appears, select the **Arrange by ►** option. A submenu appears with the same six options that were explained in the table above. Click on any desired option.

Overriding the sorting order temporarily

You can override the sorting order on a temporary basis by **focusing** on it and using the following shortcuts:

Moving an item up	CTRL+SHIFT+UpArrow
Moving an item down	CTRL+SHIFT+DownArrow

The original sorting order of the pane is restored when you **refresh** the display or restart x².

Tip: The **script wizard** issues commands for the selected items *in the order they appear* in the active pane. If the order is important (e.g. when using counters \$01) and you cannot achieve it via regular sorting, you can manually rearrange items using the shortcuts described above.



Navigating in pane area

You can navigate in the folder pane areas with keyboard and mouse.

The keyboard-based navigation is described below:

Key	Result
UpArrow	move (scroll) up by one line at a time
DownArrow	move (scroll) down by one line at a time
PageUp	jump to the top/bottom of currently displayed list of items on the screen (the pane may have a long list that spans several <i>screens</i>)
PageDown	jump to the top/bottom of currently displayed list of items on the screen (the pane may have a long list that spans several <i>screens</i>)
Home	Jump to the top of the pane
End	Jump to the bottom of the pane
Ctrl+Alt+UpArrow	Jump to the previous group
Ctrl+Alt+DownArrow	Jump to the next group
Enter any string	Jump to the first item whose name begins with the string (see incremental search)
BKSP	Takes you to the parent folder
ALT+RightArrow	Go forwards in “recently visited folders” list (history navigation chain)
ALT+LeftArrow	Go backwards in “recently visited folders” list (history navigation chain)

The mouse-based navigation is described below:

- Click with the mouse on a random row to go there.
- Turn the mouse **wheel** to scroll up/down.
- D-click in the “**background**” area to go up one level (to the parent folder).

Autorefreshing the display

x² senses changes occurring in any part of the filesystem (in most cases) and will automatically refresh all affected folder views.

However, sometimes this behavior can be a nuisance. For example, when you browse a folder while files are being downloaded into it, the display will keep flickering. To avoid that, you can temporarily suspend the auto-refresh behavior using the **View | Hold autorefresh** menu option (every time you select it, it toggles on/off).

When the refresh is off, you will lose sight of what is the latest situation in the folder. For example, some files of interest may have landed in the folder. To update the status, press **CTRL+R** (or use the **View | Refresh** menu option) periodically.

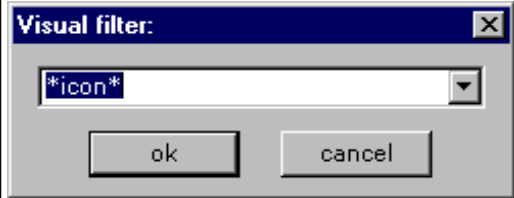
Later, don't forget to turn on the *autorefresh* mode!

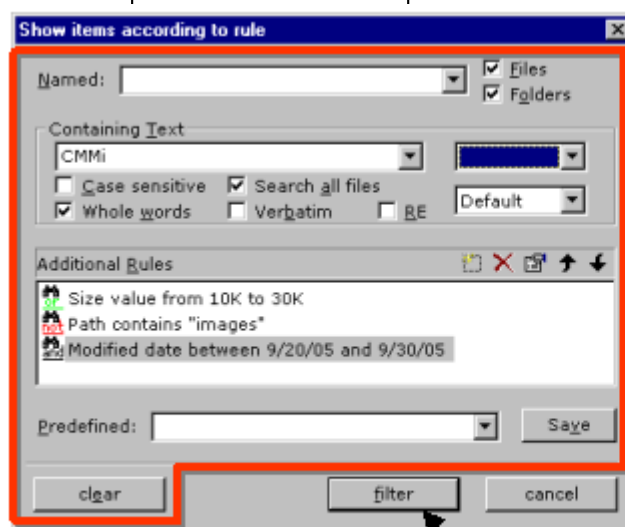
Visual filtering

While viewing the items in the folder panes, you can set Visual filters: items that match filter conditions will be visible and the rest will be hidden from view. This allows you to focus on certain items and ignore the rest.

Note that visual filters are just a visual trick: they do not actually delete the items from the disk.

Several visual filters are available for this purpose, as described below:

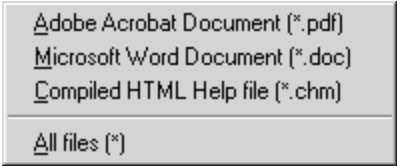
Show what-	Filtering method
Items matching a wildcard pattern	<p>Press CTRL+H (or select View Visual filters Menu Wildcard menu option).</p> <p>A window pops up.</p>  <p>Specify any string here. x² automatically pads the string (on both sides) with wildcards (*). All items that have matching names will be displayed in the folder pane, and the rest will be hidden from view.</p> <p>➤ To toggle this filter on/off, press CTRL+J (or use View Visual filters On/off menu option).</p>
Items that match a complex rule	<p>Press ALT+H (or use View Visual filters Rule based... menu option). The following window pops up:</p>



See Appendix 90 for details

Press to select items that match the rules


A major part of the interface is shared amongst three commands of x². **Appendix 90** explains this

	<p>common interface in detail.</p> <p>You can set a complex “rule” (a set of conditions involving multiple properties of an item: name, path, size, dates, containing text, etc.). Any item that matches this set of rules is displayed; the rest are hidden.</p> <p>➤ To toggle this filter on/off, press CTRL+J (or use View Visual filters On/off menu option).</p>
View only one (selected) file type	<p>Select View Visual filters Auto-filter menu option. x² pops up a list of all file types present in the current pane.</p>  <p>Select one file type from this list. All the other file types are hidden from view. Folders are not hidden.</p> <p>➤ To toggle this filter on/off, follow any one of the following methods:</p> <ol style="list-style-type: none"> 1. Press CTRL+J 2. Use View Visual filters On/off menu option 3. Use the Auto-filter again, and select the All files (*) option from the list.
Hide all folders	<p>Press ALT+J (or use View Visual filters Hide folders menu option) to hide all folders. Only files will be visible in the folder pane.</p> <p>➤ To toggle this filter on/off, repeat the command</p>
Show selected items only	<p>Press CTRL+ALT+J (or use View Visual filters Selected only menu option). Only the selected items will be displayed; all others will be hidden from view.</p> <p>➤ To turn this filter off, use the Show all items command described below.</p>
Turn off all filters (Show all items)	<p>To turn off all visual filters simultaneously, use View Show all menu option. All the items are displayed normally.</p>


Notes:


1. Although the items are hidden from view, they are not deleted.
2. The filters are applied separately to each folder pane. If you have applied it to one pane, it won't be applied automatically to the other.
3. The visual filters are applied to a folder pane; not to a folder. In other

words, once a filter is applied to a pane, it stays ON in that pane, even when you open other folders in that pane.

4. When a visual filter is applied to the active pane, a green funnel symbol  appears in the status line, to caution you that some items *may* be hidden.



Tip: If you feel the  symbol is too inconspicuous and you might miss noticing that the contents are filtered, then apply a **registry setting** to change the background color of the pane whenever a visual filter is active.

5. The  symbol (or the change in the background color) is only a general indication: you cannot tell **which** of the filters is active in *which* pane. More than one filters might be active in any one (or even both) panes.
6. The **Visual filters** menu contains five filters in all: *Wildcard*, *Rule-based*, *Auto-Filter*, *Hide folders* and *Show selected only*. Out of these, you can toggle the first three filters (*Wildcard*, *Rule-based* and *Auto-Filter*) using the **CTRL+J** command (or the **View | Visual filters | On/off** menu option).



Warning: *The CTRL+J command does not turn off two filters (Hide folders and show selected only). Consequently, if you use CTRL+J to turn off the filters, some items may still remain hidden. If you delete such a folder, x² will delete the folder without warning you about the hidden items.*

Instead, use the **View | Show all** menu option: it turns off all five filters.

7. Sometimes, you may want to apply the same filter to the opposite pane also. Press **CTRL+ALT+M** command (or use the **View | Visual filter | Same filter** menu option).

Note: This command applies only the *Wildcard*, *Rule-based* and *Auto-Filter* filters to the inactive pane. The *Hide folders* and *Selected only* filters are **not** applied with this command.



Tips:

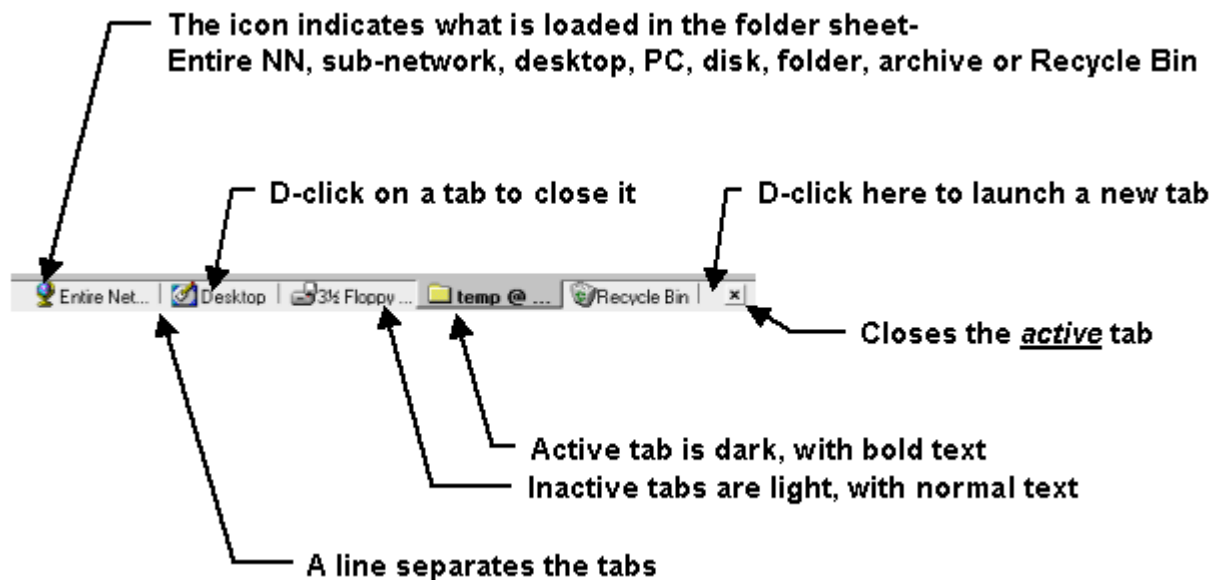
1. If you use visual filters, always use **View | Show all** menu option *before* you start deleting items.
2. Never keep the visual filters on for too long: after a while, you might forget that some items are hidden and start deleting the folders!

Tab Bar

The tab bar allows you easy access to all Folder Sheets in the Folder Pane.



Tip: Note that the term *tab* is often used to mean a *folder sheet*. That is because the tab is the most visible part of folder sheets, which themselves are not so conspicuous. So, instead of saying, “launch a new folder sheet”, we usually say “launch a new tab”.



A tab serves three major functions:


1. Clicking on the tab brings its folder sheet to the top of the stack.
2. If you drag-n-drop any selection on the tab, x² adds the items to its folder sheet. (More details on this is provided [later](#))
3. The tab displays the name of the item loaded in its Folder Sheet

If there are many tabs in the bar, the tab's width shrinks. As a result, it may not be able to show the name of the folder properly. To see the name (with path) of the folder, hold the mouse pointer over the tab. A tooltip pops up to show the complete path, as shown on left.



When there is only a single tab in a folder pane, x² hides the Tab Bar to maximize the working space on screen. When you launch another tab, x² opens the Tab Bar and shows both tabs in it (it reveals the hidden first tab).

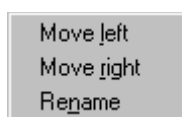
To launch a new folder sheet, do any of the following:

1. Press **CTRL+Ins**
 - **CTRL+ALT+Ins** launches a new folder sheet in the *inactive* pane
2. Use the **File | New Tab** menu option
3. In the tab bar, d-click on the empty space on the left of the  button.

This triggers two things simultaneously: A new folder sheet is launched in the active folder pane; and its tab is added to the Tab Bar.

- If the focus is on a *folder*, that folder is loaded in the new folder sheet.
- If the focus is on a *file*, then the new folder sheet will be a clone of the current folder sheet.

A new tab is always added at the *end* of the existing tabs' queue. To move a tab to a new position, r-click on the tab. A context menu pops up, offering you two options: **Move left** and **Move right**. These options move the tab by one position at a time. Repeat this step till the tab is relocated to the right place.



The third option in the context menu allows you to temporarily rename a tab. This is useful to give a functional name to the tab. For example, you may rename the tab as "Source files", "Destination", etc.

- The name is forgotten when you close the tab or close x².


To navigate amongst the tabs, use the following shortcuts:

Key	Remarks
CTRL+ALT+RightArrow	Switch to the neighboring tab on the right. When you reach the last (right-most) tab, you are taken to the first (left-most) tab again. The cycle continues endlessly.
CTRL+ALT+LeftArrow	Switch to the neighboring tab on the left. When you reach the first (left-most) tab, you are taken to the last (right-most) tab again. The cycle continues endlessly.

When the *Save program state on exit* option (available through the **Tools | Options** menu) is enabled, then all the tabs (i.e., folder sheets) are also saved when you close x². When you restart x², all tabs are loaded.

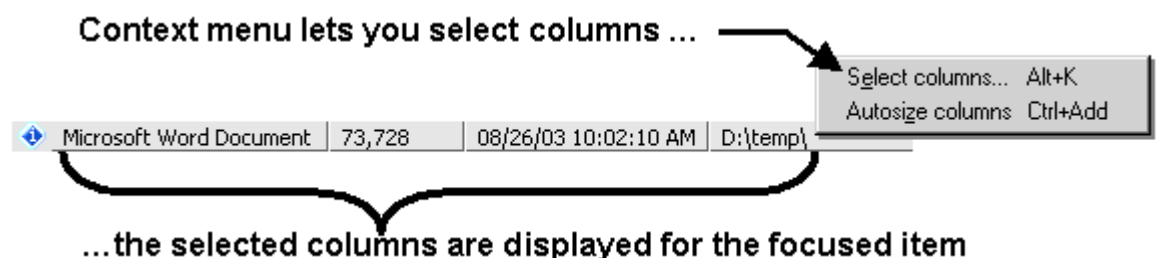
- If the folder represented by a tab is renamed, moved or its path is renamed, then the tab shows the Desktop. However, it continues to point at the original folder. This is very useful: x² does not lose the reference if the folder had become only *temporarily* unavailable (for example, because of a broken network connection)

x² provides the following commands for closing the tabs:

- To close *any* tab (whether active or not) d-click on it.
- To close the current (active) tab, press **CTRL+F₄** (or use the **Window | Close Tab** menu option). You can also press the  button.
 - You cannot close the last tab: at least one tab has to remain active in each folder pane.
- To close all tabs (*except* the active tab), press **CTRL+SHIFT+F₄** (or use the **Window | Close all tabs** menu option).

Info Bar

You can think of Info Bar as a tiny folder pane that is permanently set in *Details style*, and which can show only one item at a time.



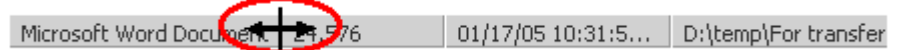
There are two major uses of Info Bar:

1. If you have set your folder pane to *thumbnails*, *icons* or *list style*, you will not be able to see the information available in the *Details* style. Info Bar shows you the required information.
2. Even if you have set your folder pane in *Details* style, you can't see more than 3-4 columns at a time because of width constraints. In such case, you can set up Info Bar to see additional columns.

To view/hide Info Bar, use the **View | Toolbars | Info bars** menu option.

Following controls are available to change the appearance of Info Bars:

- To change the columns displayed in the Info Bar, r-click on it. The *Column Organizer* dialog (see **Appendix 9R**) pops up and lets you select which columns to display here.
- To change the width of any column, hold the mouse pointer on its right-side edge. The pointer changes its shape, as shown below.



Now click the LMB and drag sideways to adjust the column width. When you get the desired width, release the LMB.

You can also automatically resize all columns of the Info Bar in one shot: r-click over the Info Bar. A context menu pops up. Select the **Autosize columns** option. Each of the columns will get adjusted to the length of entry in it.

Note: The context menu from **Folder panes** is reused in InfoBar. Because of this, it shows keyboard shortcuts (**ALT+K** and **CTRL+Add+**) that *actually* do not work in InfoBars.

Select columns... Alt+K
Autosize columns Ctrl+Add

Using Folder panes in pairs

Although you can use x² in *single pane* mode, its tremendous power can be reaped only when you use x² in *dual pane* mode.

So let us see how to use the panes efficiently *in pairs*.

First, let us see how to adjust the sizes of these panes in different ways:



Make the panes of equal size	This is the most usual mode of working. Press CTRL+E to make panes of equal size. The divider line between the two folder panes will jump to midpoint. You may have to readjust all columns in both folder panes.
Adjust panes to desired size	Often you will need to resize the pane (for example, to see all the columns, or to see more items). Click on the divider line between the panes and drag it to the desired position.
Turn off the inactive pane	<p>The command CTRL+O (or menu option View Dual Pane) toggles the display between <i>single-pane</i> and <i>dual-pane</i> modes. It toggles the inactive pane off/on. In the <i>single-pane</i> mode, the commands that work on two opposite panes are disabled.</p> <p>Caution: <i>The CTRL+O command discards all tabs and selection information for the closed pane. When you turn the inactive pane off, and turn it on again, only the current tab survives.</i></p> <p>So, if you are going to use the same set of tabs again, it is a good idea to save the current set of tabs first! When you restore the second pane, you will have to reload the folder group.</p>
Maximize the active pane (but stay in <i>dual-pane</i> mode)	<p>You may want to maximize the active pane without using the <i>single-pane</i> mode. (A typical use is when the active pane has many tabs, and you want to see all tabs fully. Another typical use is to set the pane in Details style and add multiple columns. In this case, you will need to widen the pane to see all columns.)</p> <p>Press CTRL+E twice. The active pane will now occupy nearly the whole screen, and only a little part of the inactive pane remains visible. (This is to remind you that you are still using the <i>dual-pane</i> mode; and so all dual-pane commands are fully available.)</p>

The **ALT** key is very useful in directing most actions to the inactive pane (The key to remember this is to think **ALT** = *Alternative (=inactive) pane*).

- Press **ALT+Enter** on any subfolder displayed in the active folder pane (or **ALT+d-click** on it). That folder will open in the opposite pane. This is a quick method to check all subfolders of the folder you are browsing.
- Press **ALT** and click on any node in the tree. The node will open in the *inactive* pane (*not* in the active pane).
- After entering an address in the Address Bar, press **ALT+Enter**. The path you entered will be opened in the *inactive* pane (*not* in the active pane).
- The **ALT** key works in pane headers also: if you press **ALT** while clicking on any item in the pane header, it will be opened in the opposite pane.

Other useful commands are:

- **CTRL+I** (menu option **Go to | Same folder**) loads the current folder of the active pane in the inactive pane.
- **ALT+CTRL+I** is the reverse of the above: it loads the current folder of the inactive pane in the active pane.
- **CTRL+U** (menu option **Go To | Swap panes**) swaps the panes' contents. This is useful if you are used to copying/moving items only in a certain direction (e.g. from-left-to-right).

Using QuickViewer

While you browse through the folders, you can have a quick glimpse of the files with the **QuickViewer**. You can quickly identify files of your interest without having to open each and every file.

The QuickViewer can be toggled on/off with **CTRL+Q**. It displays the focused file.

The QuickViewer has two tabs (use **ALT+Q** to switch between them):

Tab Name	How it behaves
Draft preview	Depending upon the file type, this tab displays it in a different way. (See the table on the following page for details). As soon as you focus on a file, this tab shows it instantly.
Normal	Uses ActiveX plug-ins of Acrobat, Microsoft Office etc. to display those files in their “normal” mode. It also shows an improved display of text, HTML and graphics. This is almost like viewing a document with its native application, but in the QV pane.



Tip: The **Normal** tab takes a longer time to load the focused file, during which you cannot shift the focus in the folder pane to another file. Therefore, for normal use, make use of the **Draft Preview** tab, and use the **Normal** tab only to view the file in detail.

Using the *Draft Preview* Tab of QuickViewer

File type	Typical extensions	QuickViewer Display (<i>Draft Preview</i> Tab)
Text	txt, rtf, ini, cpp, ...	Plain text content. Supports plain ANSI, OEM, Unicode and UTF-8
HTML	htm, html, xml	Formatted page (hides the HTML tags) ➤ If you want to see raw HTML, pick the “Text only” option from the QuickViewer’s context menu.
Microsoft Office	ppt, doc, xls	First page only. ➤ The file is displayed in QV only if the “save picture preview” checkbox is ticked in document’s Properties dialog box Tip: To change this property, use File Properties menu of the concerned application. But keep in mind that this option results in increased file size!





		Tip: If you have installed IFilters , you can see the unformatted text of these files in QuickViewer. (Windows 2000/XP/2003 only)
Portable document format	pdf	Text interspersed with control characters Tip: If you have installed IFilters , you can see the unformatted text of pdf files in QuickViewer. (Windows 2000/XP/2003 only)
Image	png, gif, jpeg, tiff, ...	Displays the image ➤ The display is suppressed if the file size exceeds the limit set in thumbnail field of Tools Options menu option, General tab ➤ Some image types (e.g. xcf) are treated as “other types” (see below), and not as Images.
Audio/ Video	Mp3, avi,	➤ Windows Media Player’s controls (play/pause/stop etc) ➤ Starts to play the file automatically.
Others	exe, zip, etc	Hexadecimal preview of content

Since the purpose of QuickViewer is to provide you with a quick glimpse of the file, it will not display the entire file: it will show only the beginning part. You can change how many bytes it should show, by setting the **Program Options**.

R-click on the QuickViewer to set it in different modes. (See **Appendix 9F** for details).



Tip: The QuickViewer has a very powerful feature: it is fully synchronized with the folder pane. So, when you use a command to find text (**CTRL+G**, **ALT+G**, **CTRL+F** or **ALT+H**), files that have the target text string will be loaded in the QuickViewer so that the appropriate portion of the file is visible; the matching string is shown in bold, as in Google search. To see the next match, press **F3** in QuickViewer.

Selecting items (and focusing on them)

For a moment, think about a shooting competition. What sets the champions apart from others? Which is the most critical task? Taking aim, of course! Everyone pulls the trigger equally well.

In a similar way, selecting items (or focusing on them) is an important step in x², because-

- Most of x²’s commands act on the *selected* items en masse.
- Some of the x² commands work only on *focused* items. Besides, the

QuickViewer and Editor² show the contents of the item that is under focus.

Therefore, before learning any commands, we should perfect the art of selecting (or focusing on-) the desired items.

x² provides many techniques to select and focus on different items. Before checking them out, let us first thoroughly understand these terms.

Understanding selection and focus

These terms can be explained with an example:

Imagine you are shopping for a pen. You can *select* multiple pens, but you can *focus on* (=look at) only one pen at a time. Further, if the store has different shelves for displaying pens, you may *simultaneously* select pens from different shelves.






















The concepts of *selection* and *focus* are treated very similarly in x²:

- You can select multiple items at a time, but you can keep only *one* item under focus.
- If you have multiple folder tabs, you can make a selection in each tab independently. Similarly, you may focus on one item in each tab.
- The selection/focus status is the property of each folder pane/**scrap pane**; not of the folder. So, you can open the same folder in multiple panes/tabs and apply different selections and focus in each pane/tab.

How to recognize the selection / focus status of an item

Look at a folder pane or a scraps pane.

Depending upon the display *style* of the pane, you may see different markings around the items' names, as shown below:

Display style	Indication of <i>selection</i> and <i>focus</i>	
	File-02 is focused <i>and</i> selected	File-02 is selected File-03 is focused
Icons	 File-01  File-02	 File-01  File-02  File-03
List	 File-01  File-02  File-03  File-04	 File-01  File-02  File-03  File-04
Details	 File-01  File-02  File-03  File-04	 File-01  File-02  File-03  File-04

These markings actually show the *selection* and *focus* status of each item.

Each item can have one of these four states as shown below:

State	How to recognize?	Example (See in figure)
<i>Selected</i>	Highlight on the file's name	File-02 (in both columns)
<i>Focused</i>	A dotted line around the file's name	File-03 (in both columns)
<i>Selected and focused</i>	Highlight on the file's name, <i>and</i> a dotted line around the file's name	File-02 (in the first column only)
Neither <i>selected</i> nor <i>focused</i>	No highlight or dotted line around the file's name	File-01 (in both columns)

Overview of selection methods

x² has a wealth of alternative commands for making selections. Some of the selection methods are manual; while others are mass-selection tools that use filters and search conditions.

x² also has *multiple methods for focusing* on desired items.

Let us see what methods are available to select/unselect items:

1. Using *incremental search* (type the beginning letters to find a match)
2. All the usual *mouse gestures*, including **CTRL+Click**, **SHIFT+click**,

lasso selection, hovering the mouse on the items, etc

3. Press **Space Bar** or **Insert** to **toggle the selection status** of the item under focus
4. Select filenames that **match a wildcard**, or multiple comma-separated wildcards
5. Select an exact number of items (**Range**) below the focus
6. Select **files that have the specified text** in them.
7. Select files that have the specified text in their **contents or their text-type columns**
8. Reuse a previously “saved” selection (see **Mark | Selection** submenu)
9. Select **folders only** (including items that are *deemed* folders)
10. Using complex **Rules (hyper-filters)** to match items by size/date or any other piece of information that appears in item **columns**
11. Select **all the items in the pane** in one stroke
12. Unselect all the currently selected items
13. Select (or unselect) **items of same type as the focused item**
14. **Invert the selection status** of all items in the pane (all selected items become unselected and vice versa)
15. Select (or unselect) entire **groups** of items

By combining these commands, you can build complex collections of items!

Notes:

1. The elementary selection mechanisms are *additive*: whatever you select is added on top of any existing selection. To start a fresh selection, unselect everything first by pressing **ALT+A**.
2. As you move around, the focused item is changed and that usually cancels all previous selections. To move the focus without affecting the existing selection hold down **CTRL** or turn **Mark | Sticky selection** on. This will help you to handpick items scattered in the folder listing.
3. Selection can be assisted by intelligent use of **sorting**. For example, the easiest way to select all files modified within the last day is to sort by date, click on the first (topmost) item and **SHIFT**+click on the last file whose date is within the last 24-hour range.

The following sections explain all selection methods listed above.

Using incremental search

This feature allows you to select a single item that has a name (or extension) that begins with the letters or digits you type. (Well, actually it changes the *focus*, but if you are not using the **sticky selection** mode, then changing the focus to a new item automatically *selects* that item. So, we will consider this as a mechanism that both selects and focuses. In fact, since it takes us to a certain part of the pane, it is also treated as a **navigation mechanism**!)

To use this feature, simply start typing in the folder/scrap pane. The focus moves to the first matching filename; e.g. typing **sa** will take you to the first file whose name matches this substring (e.g. **sample.txt**). If you continue typing more letters, x² will go on finding the first file that matches the string.

This feature is called *incremental search*.

- x² always searches the pane in the *top-to-bottom* direction to find a match. Therefore, depending upon the **sorting** order, the “first match” could be a different item.
- If the pane does not contain a matching item, then the focus remains on the current item.
- You must enter the entire string at once, without pausing.
 - If you enter the string slowly, x² will treat each keystroke as a separate incremental search, and try to match each letter separately. (For example, instead of locating an item beginning with **sa**, it will first try to find an item beginning with **s** and then search for another item beginning with **a**.)
 - If you pause while entering the string, the incremental search will try to match items with this partially entered string. Once you pause, you cannot continue by entering the next part of the string: You have to enter the entire string once again.
- To select the next match, type the same string again. (This could be tedious if you are trying to match a long string. In that case, it is better to use the **select filters** described later.)
- Incremental search works with file extensions also: Hold **SHFT** while typing the string. For example, hold **SHFT** and type **tx** to find the first filename that has a matching extension (e.g. readme.**txt**). This is useful when you have already sorted the items by type.
- Incremental search is not limited to filenames: Just bring any column in the leftmost (first) position and its contents will be used to match the partial strings you type.

Selecting all, unselecting all

This pair of commands is extremely useful: it allows you to select all the items in the active pane, or unselect all the selected items.

- To select all the items in the active pane, press **CTRL+A** (or use the menu option **Mark | Select all**).
- To unselect any previously selected items in the active pane, press **ALT+A** (or use the menu option **Mark | Unselect all**).

Selecting and unselecting items manually

You can manually select (or unselect) items using the following controls:

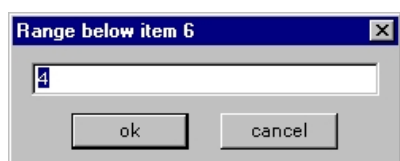
To select-	Do this
A single item	<ul style="list-style-type: none"> ➤ Click on the item. ➤ Move the cursor to the item with the arrow keys ➤ Press the Space Bar (the selection toggles on/off) ➤ Hover the mouse over the item*
Multiple adjacent items	<ul style="list-style-type: none"> ➤ SHFT+select items with lasso ➤ SHFT+Click ➤ SHFT+hover the mouse over items*

To select-	Do this
Multiple <i>nonadjacent</i> items	<ul style="list-style-type: none"> ➤ CTRL+select items with lasso ➤ CTRL+Click ➤ CTRL+hover the mouse over items*

* For this command to work, select the *single-click activation and hover selection* modes from the **Tools | Options | Window** menu. By combining these modes, you can do the same work with half the number of clicks: select an item by hovering the mouse over it (no clicks required), and launch the item with a *single* click.

Selecting an exact number of items (Range) below the focus

Select **Mark | Select Range...** menu option.



A window pops up as shown on left. The current item's own "line number" is displayed in its window bar.

Enter a number in this window and press **OK**. x² selects the specified number of items below the focus item, *including* the focus item.

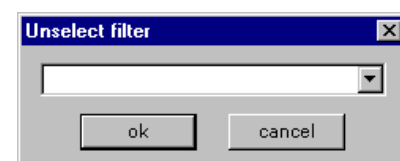
The Select and Unselect filters

x² has a set of two mass-selection filters:



Filter function	Shortcut	Equivalent menu option
Select all items whose names contain the specified string	Gray+	Mark Select group...
Reuse the last string for selecting (without a dialog)	ALT+Gray+	No equivalent in menu

Once you have selected some items, you may need to *unselect* some of them. x² has a set of two mass-*unselection* filters:



Filter function	Shortcut	Equivalent menu option
Unselect all items whose names contain the specified string	Gray-	Mark Select group...
Reuse the last string for <i>unselecting</i> (without a dialog)	ALT+Gray-	No equivalent in menu

Note that these filters will find your search string even if there are other strings on either side of it (In other words, they automatically add * on both sides of the search string before acting). You can also use the wildcard ? to represent a single character inside your search string. For example, if you enter **wom?n**, the command will act on all files that contain either *women* or *woman* (or both) in their names.

Note that these commands searches *both* file names and extensions. For

example, to select all PowerPoint files, enter **ppt** in the box. (Note that you do *not* have to enter ***.ppt**.)

Selecting / unselecting items of same type as the focused item

The command **CTRL+ALT+Gray+** adds to the selection all files that have the same extension as the currently focused item.

Its complementary command **CTRL+ALT+Gray-** removes from the selection all files that have the same extension as the currently focused item.

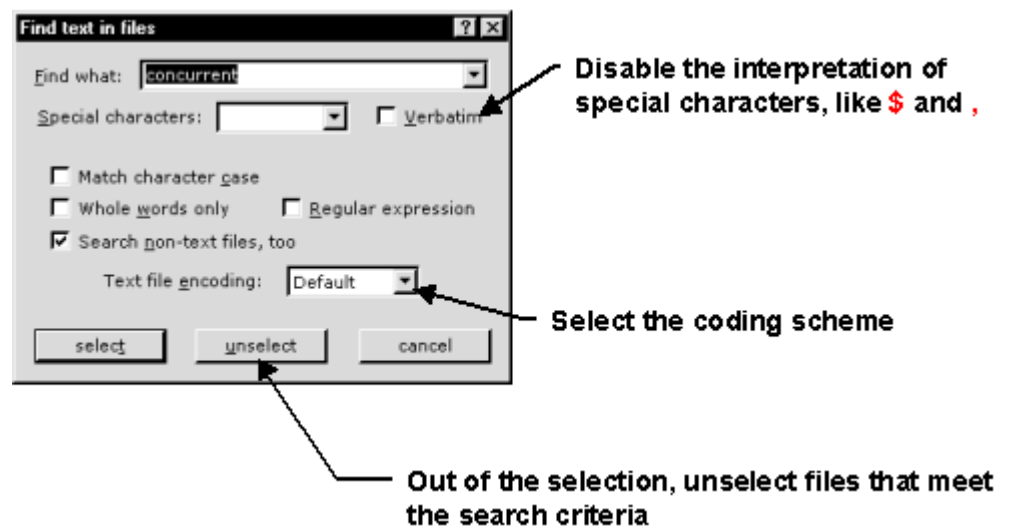
Both these commands work for items *without* extension, and also on folders.

Note: Both commands are available only through shortcuts: there is no equivalent command in the menu system.

Selecting / unselecting files that contain specified text

You can search all files in the active folder pane for specified text, and either select or unselect all files that contain this text. Typically, you will search for a condition, and then you will unselect a few items using some other criteria.

To launch this mass-selection tool, press **CTRL+G** (or select the **Mark | Containing text...** menu option). A window pops up as shown below:



This command is mainly for “pure text” files in various encodings (ANSI, Unicode, UTF8 and OEM). The default encoding is “Windows” text but you can override this using the **Text File Encoding** combo box.

- This is only required for files *without* a starting Byte Order Mask (BOM) identifying their type.
- If there *is* a valid BOM, then x² reads them appropriately disregarding the forced encoding setting.

You can also search for text in non-text files like word documents, if you check the appropriate box in the **CTRL+G** dialog. To search for non-printable characters, use the format \$xx, where xx is the hexadecimal value you are after (e.g. newline = 10 in decimals= **A** in hex; so search for \$0). For your convenience, some frequently used non-printable characters are provided in the **Special characters** drop-down box.

You can even search for multiple keywords in one go, separating them with commas. See **Appendix 9L** for the required syntax.

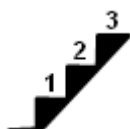
Tip: The **QuickViewer** automatically synchronizes itself with the matching text and centers its focus around the text you searched for.



Quick search in file contents and text-type columns

You can select all files that have the specified text either in their contents or in any of their *text* type **columns**.

The step-by-step procedure is as follows:



1. Select menu option **Mark | Quick search...** Immediately, the focus will shift to the **Address Bar**, where you will see the following instruction:

: type your phrase and press <Return> to search

2. The highlighted text is actually an instruction for you. Just type your search string, which will replace this instruction.
3. Press **Enter** to complete the command.

You can also launch this command directly in the Address Bar-- Just click in the Address Bar, and enter your string in the following format:

: <search string> **Enter**

x² will select (mark) all files that contain the search string. It will also select a file if *any* of its **text-type columns** contains the search string.

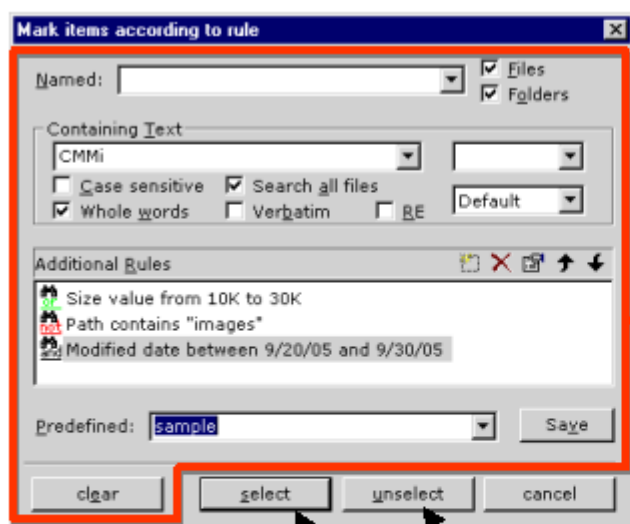
Note that this command will search in the text columns even if they are *not* displayed on screen.

Selecting (marking) all items that match a rule

The command **ALT+G** is also a mass-selection tool, but is much more powerful: it can check all the properties of the items against a specified complex set of conditions (“rules”).

This command is also available through **Mark | Matching a rule** menu (located there because it *marks* the items).

When you use this command, a dialog box pops up as shown below:



See Appendix 90 for details

Items matching the rule-set will be unselected from the previous selection

Select all items matching the set of conditions

You can set different conditions in this window. When you press the **Filter** button, it will select (mark) all items that meet these requirements.

For an explanation of the controls provided in this window, please see **Appendix 90**.

You can name the set of rules and then save the set for using it later.

Selecting folders only

To select only the folders from a pane, press **CTRL+ALT+Q** (or use the menu option **Mark | All folders**). All folders are selected.

This is useful if you want to move all folders to a scrap pane, for example.



Tips:

1. x² treats all drives and control panel as “folders” and selects them.
2. Note that you can use this command to hide all files: after selecting all folders, activate the **show selected items only** filter. Note also that x² has another visual filter called **Hide all folders** to complement this.

Selecting (and unselecting) groups

You can select and unselect an entire **group** of items. Just click anywhere in a group and then use the following pair of commands:

To do this..	Press..
Select group	CTRL+ALT+SHIFT+Gray+
Unselect group	CTRL+ALT+SHIFT+Gray-

Note: This feature does not work well if you have enabled the **single-click activation** feature, because the mouse will start selecting all entries.

Inverting a selection

Suppose you want to select 96 items in a pane that has 100 items.

What would you do? Select all 96 items laboriously? Of course not! It is much faster to select the 4 items you *don't* want and then just invert the selection, so all unselected items are selected and vice versa.

To use this command, first select the “unwanted” items and then press **Gray*** key (or use the **Mark | Invert selection** menu option).

Remembering a selection

In the preceding sections we saw how to select items using manual and mass-selection methods. Sometimes, you want to remember such a selection. x² can remember which items you had selected, by saving your selection definition. (Note: we are *not* talking about saving the selected *items*!)

Note that you can store a selection from a *scrap* pane *also*. Such a selection would contain items from various folders, drives and even PCs. (In contrast, if you store a selection made in *folder* pane, all items in the selection must belong to that folder only: you can't select items from different folders.)

To save the selection, press **CTRL+F₁₁** (or use the **Mark | Selection | Store** menu option). x² will store the current selection in a “selection clipboard”. Now you can change the selection, secure in the knowledge that x² remembers your selection for you.

Later, whenever you want to select the same items again, press **F₁₁** (or use menu **Mark | Selection | Select**).

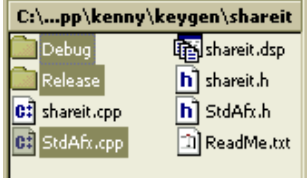
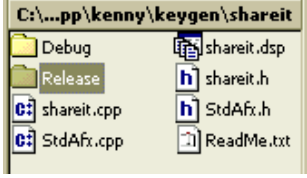
On the other hand, suppose that you have already selected some items in the folder, but you want to *unselect* items that are on your “selection clipboard”. To do that, press **ALT+F₁₁** (or use menu **Mark | Selection | Unselect**).

Now let us assume you have a saved selection, and you want to add some more items to this saved selection. Here are the steps:

1. After making the new selection, press **F₁₁** (or use the **Mark | Selection | Select** menu option). This will retrieve contents of the Selection Clipboard and add it to the current visible selection. (This is a Boolean OR operation between the current selection and the selection clipboard.)
2. Save this combined selection in the Selection Clipboard with **CTRL+F₁₁**.

If you want to find items that are *common* between a saved selection and the current selection (in the active pane), press **SHIFT+F₁₁** (or select the **Mark | Selection | Combine** menu option).

This is best explained with an example: in the following table, the first column shows the current selection, and the second column shows the selection stored in the selection clipboard. The third column shows the result of **SHIFT+F₁₁**.

Current selection	Stored selection	Result of SHFT+F ₁₁
	Release Nonsexist.cpp	

Only files that are both currently selected *and* also present in the “selection clipboard” remain selected. All other files are unselected. (This is a Boolean AND operation between the current selection and the selection clipboard.)

A saved selection has two interesting uses:

1. Use it to check if two collections have the same items

Store a selection (**CTRL+F₁₁**), switch over to a *different* folder, and use it (**F₁₁**). x² tries to select *matching* items in this folder.

(Note that this command matches the items by names only; not by content. So the selected items *could* be actually different; although they have the same name.)

2. Hide the non-matching items (to reduce clutter):

After following the steps described above, you can hide the non-matching items by pressing **CTRL+ALT+J** (or selecting the **View | Visual filter | Selected only** menu option). Now this pane shows only those items that are present in the other pane; and hides the rest. (But don't worry- the non-matching items are not deleted: you can unhide them by using the **View | Show all** menu option.)

Note that this quick-and-dirty technique has some limitations:

- x² can remember only *one* selection (In fact, that single selection is shared between all the running copies of x²: individual copies cannot have their own selections).
- Each time you close x² and restart, the selection is forgotten.

These limitations are overcome with **scrap containers**, as shown below:

Remembering multiple selections

Sometimes, you need to make multiple selections (each for a different purpose) and remember them all.

For example-

- Source material required for a presentation (some PowerPoint files, some images, some pdf files with description, etc)
- Items to be sent to boss next Thursday (budget papers, worksheets, project proposals)
- Items to be read for the meeting on 2nd July.

So, instead of memorizing *selections* of items, you ask x² to remember *collections* of items: After copying items into a **Scrap Container**, save it with a suggestive name that reminds you of its purpose.



Tips:

1. Include the subject (and also the date-stamp for time-bound tasks) in the filename itself (for example, **Meet_2Jul.cida** will remember your collection for the meeting on 2nd July.)
2. Organize your office work and personal work into major areas. If you are more organized person, create subfolders to reflect subtopics. Create a folder system that reflects this organization. Always store your collections in the appropriate folders; so you will know where to search. See **chapter-8** for a detailed discussion about this.
3. Using Scrap Containers, you can define and remember unlimited number of collections. As discussed, when you copy an item into a scrap container, x² does not occupy double the disk space. Therefore, you can copy the same item into multiple scrap containers without really bothering about disk space.

How your actions affect the selection and focus status

When you move in x² or take some actions, your selection is affected. Let us see what actions destroy the existing selections, so you can avoid them.

By default, in a “fresh” pane, none of the items are selected, and the focus is on the top item. (You get a “fresh” pane when you start x², load a new folder in the folder pane, launch a new tab with a new folder or load a new selection in the **scrap pane**.)

However, the selection and focus status changes as soon as you start any activity in the pane.

- When you launch a new tab while *focused* on a file, x² will load the same folder (clone it) in the new tab, and automatically *select* the same file in this new tab.
- If you click in the “**background**” area of the pane, the previously made selection is lost, but the focus is not lost.
 - If you have turned on the **sticky selection** mode, the selection remains undisturbed.
- When you apply a different **sorting order** to a pane, the items are re-arranged, but their focus and selection status remains unchanged.
- When you close a tab, the selection and focus information for that tab are lost.
- When you close x², all selections and focus information for all tabs is lost.
- When you revisit a folder tab during a session, the selection and focus remain unchanged from the last visit.
- You may focus on an item regardless of its selection status, but the reverse is not true: as soon as you select the *next* item in a pane, the focus automatically shifts to it.
 - If you want to focus on a certain item, you will have to again **shift the focus to it**.

- When you visit the recently visited folders (i.e., when you go up/down in the **history chain**), then the selection and focus information for the folder you just left is lost.



Tip: To avoid running a command on unintended items, you should carefully check your current focus/selection just before issuing the command.

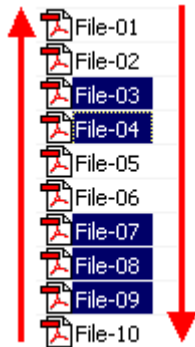
Changing focus without affecting selection

Some commands apply to the *focus items* in active and inactive pane; rather than on the *selected items*. For example, commands composed with some **tokens** act on the focused items from both panes.

To use such commands, you have to manipulate the focus in the active pane and also the inactive pane.

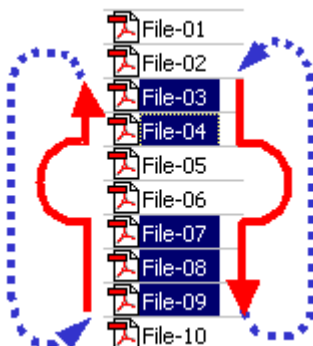
But there lies a problem: If you have already made a selection in these panes, moving the focus would destroy the selection. Therefore, you must move the focus *without* disturbing the selections, and then issue the token-based commands.

x² offers the following controls to move the focus without disturbing the selection:



1. Using **CTRL+UpArrow** and **CTRL+DownArrow** move the focus up and down respectively. You can move the focus to *any* item in the pane: even to those items that are *not* selected currently. (In other words, the current selection has no bearing on the focus.)
 - When you reach the top/bottom end of the pane, the focus remains there: it cannot jump to the other end of the pane and continue in the same direction.
2. Using **CTRL+PageUp** and **CTRL+PageDown** keys act similarly, but they take the focus to the top and bottom of the *screen*, respectively. These keys are useful to move the focus in larger jumps.

Note that we have deliberately used the term “*screen*” above, and not “*folder pane*”: If the folder pane contains many items, its list will extend beyond a *screen* (you have to scroll down/up to see the remaining items in the folder pane). In such case, the shortcuts mentioned above will *not* jump to the top/bottom of the entire list. Rather, they will stop at the top/bottom of the partial list that is being shown currently on your screen.



3. Using **ALT+UpArrow** and **ALT+DownArrow** also move the focus up and down respectively. But in this case, the focus remains *within* the current selection. If you had selected non-contiguous items in the pane, then the focus jumps over the “gap” to the next selected item. (In other words, you cannot focus on an unselected item using these keyboard shortcuts.)
 - If the focus reaches the last item in the selection, a downward move will cycle to the first selected item (and vice-versa for the reverse direction).
4. Using **sticky selection**: In this mode, the selection *sticks* (i.e., it does not get disturbed when you move the focus with **UpArrow**, **DownArrow**, **PageUp** or **PageDown** keys.)

You can toggle the *sticky selection* mode on/off by pressing **ALT+S** (or using the **Mark | Sticky selection** menu option).

Even when this mode is in effect, you can still use the different selection methods described above to add more items to the selection (or to remove some items from the selection).

Note: The *sticky selection* option is not compatible with *hover selection* option. You cannot select both these options simultaneously. Choose the option that makes you more comfortable.

Using Scrap Containers

Scrap container is so powerful that it deserves a separate chapter to describe it. But in this section, we will see only the following basic operations:

- Changing the appearance of the Scrap Container's window
- Adding items from different folders (or the NN PCs) to a scrap pane
- Removing items from a scrap container
- Deleting the items from the scrap container *and* the disk
- Save the contents of a scrap pane (as CIDA files)
- Re-load the saved contents (i.e., a CIDA file) into a scrap pane
- Edit the CIDA files

More specialized uses like synchronizing folders and searching for duplicates will be explained in later chapters.

Changing appearance of scrap container

The GUI of a Scrap Container is very similar to the main x² GUI; so almost all GUI controls of x²'s main screen also apply here.

The only exceptions are as follows (see the screenshot on page 20):

- A scrap container does not have a folder-tree pane
- The scrap panes do not have pane headers
- The scrap pane does not have a **history chain**

Refer to the preceding sections to see how to control the appearance of the scrap container's GUI.

Adding items to a scrap pane

There are multiple ways to add items to a scrap container.

1. Select items in folder panes and press **CTRL+S** (or select menu option: **File | Send to scrap**).
 - If a scrap container is already open, the selected items will be sent to its active pane.
 - If a scrap container is not open, x² opens a scrap container and places the selected items in its active pane
2. Drag-n-drop the selection from a folder pane into the desired scrap pane.
3. R-drag a selection of items from folder pane of x² to a scrap pane. Select the *Insert here* option from the **context menu** that appears.
4. If you have a path to a *single* item stored in the clipboard, then you can paste it in a Scrap Container's Address Bar and press **Enter**. The item will be added to the active scrap pane.

5. If you have stored paths to *several* items in the clipboard, these items can be directly inserted into the scrap pane by selecting **Actions | Import clipboard** menu option.

Notes:

1. The clipboard must contain *complete* paths, not just the filenames.
 2. The clipboard must contain one path per line; not a comma-separated list.
 3. Apart from the paths, if there is any extra text, it will be ignored.
6. You can even drag-n-drop items from one scrap pane to another scrap pane.

Note: When you drag-n-drop items from one (source) scrap pane to another (target) scrap pane, the items will *not* disappear from the source scrap pane, and yet they will appear in the target scrap pane. So, if your intention is to *move* the selection, then after finishing the drag-n-drop, you will have to delete the selected items from the source pane.

Removing items from scrap panes

To remove any items, select the items and press **DEL** (or use menu option **File | Remove**). The images of these selected items will be removed from the scrap pane, but the original items are not erased from the disk.

Deleting items

Using the scrap pane, you can delete the original items from the disk: press **CTRL+DEL** (or use menu option **File | Delete**). These items will be deleted and their images will be removed from the scrap pane.

Flattening a folder system

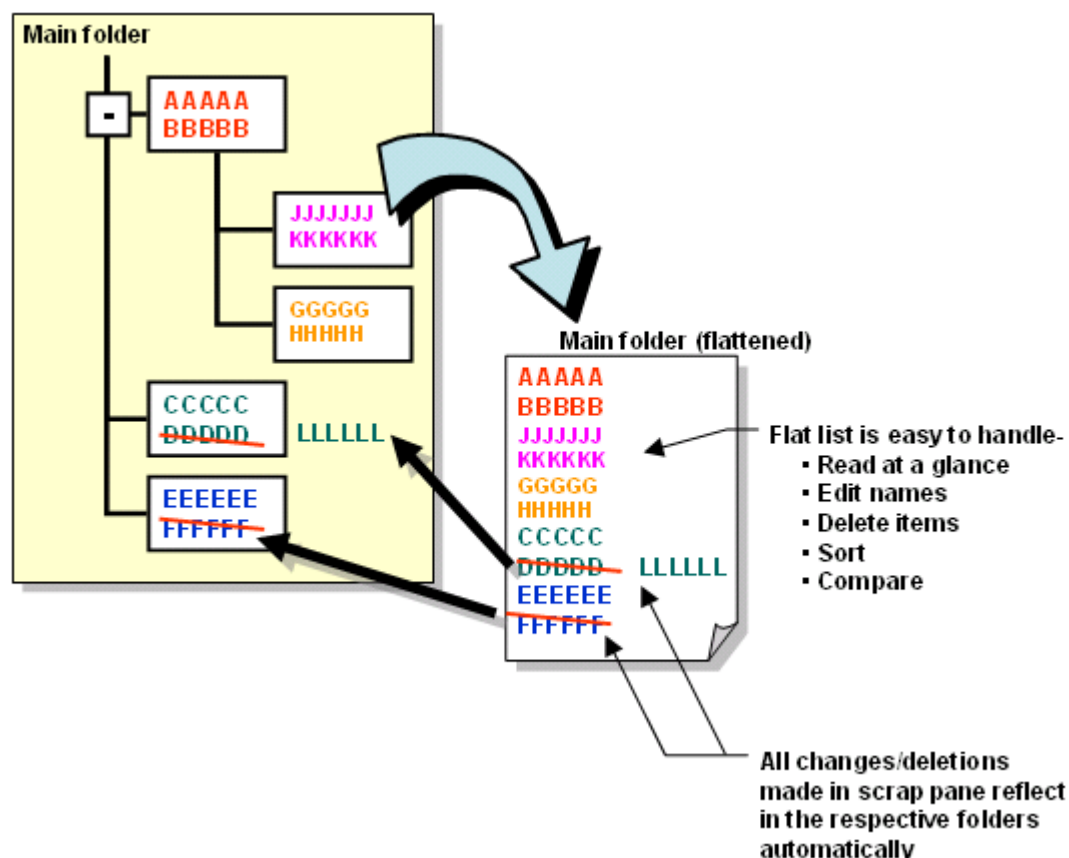
Browsing the items in a complex folder system is difficult: you have to go up and down the folder hierarchies and open multiple folders. Even the dual panes of x² can't show more than two folders at a time. In complex directories, the user is lost: he can't be sure if he has already browsed through a particular subfolder.

Scrap panes make this task very easy by flattening the selected folders: They show all the items contained in the folder and its subfolders in a flat list. A flat list is much easier to read, edit, compare different items, rename the items and eliminate duplicates.

For example, see the figure below, in which two operations are carried out in scrap pane:

1. The file **DDDD** is renamed to **LLLLL**.
2. The file **FFFFF** is deleted.

Both these changes are immediately reflected in the respective folders.



You can flatten any folder or directory; even the entire Network Neighborhood!

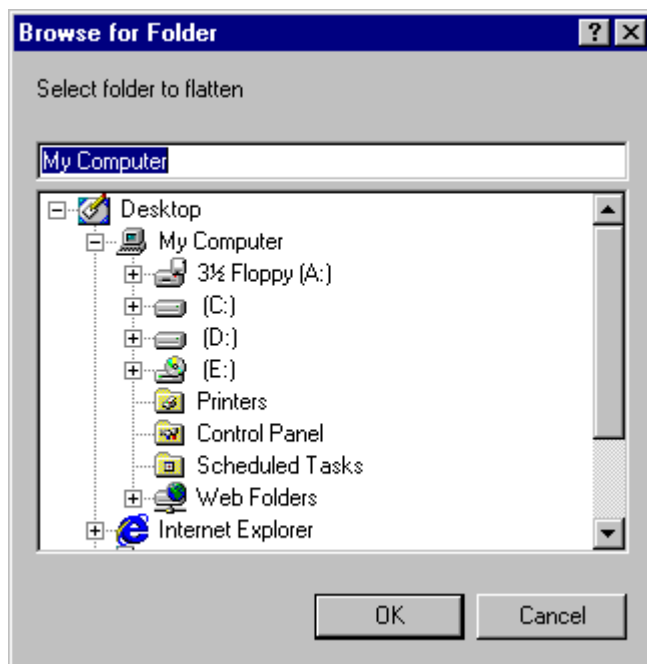
There are multiple ways to flatten a folder:

1. In x², highlight a folder (or a CIDA file) in folder pane and press **SHIFT+Enter** or select the **Files | Browse Flat** menu option. Each time, a new scrap container is opened and the folder is flattened into it.
 - If the folder has several subfolders, you can flatten them in one stroke into a single scrap pane: Just **select** them and press **SHIFT+Enter**.
 - Sometimes, you need to flatten multiple *unrelated* folders in a *single* scrap pane. (For example, to check if they have **duplicate files**). To do this, after selecting each folder, press **CTRL+SHIFT+Enter**. This will flatten the folder in the “nearest” scrap pane (i.e., the scrap pane that was focused on last).
 - Typically, you will flatten the first folder using the **SHIFT+Enter** command and then flatten the subsequent folders in the same scrap pane by using the **CTRL+SHIFT+Enter** command.

Caution: *If you have opened multiple scrap containers, focus on the correct scrap pane (by clicking in it) before switching back to the main screen of x² and flattening each folder; otherwise your folder will get flattened in the wrong scrap pane!*



- If you want to flatten a folder without leaving a scrap pane, select the **Actions | Flatten path...** menu option in the scrap container. A navigation window opens:



Navigate to the desired folder and select it. The selected folder will be flattened and added to the scrap pane contents.

- You can select *multiple* folders in a scrap pane, and flatten them in one stroke by pressing **ALT+Enter**. The selected folders will be flattened in the opposite scrap pane. One possible use of this is to perform a local search limited to a few hand-picked folders.
- Right-drag the selection from x² into a scrap pane. When you release the button, a context menu pops up, with three choices:



Option	What x ² does
Insert here	<p>Inserts selected items in scrap pane.</p> <ul style="list-style-type: none"> ➤ All folders in the selection are treated as single units: x² does not list the files and subfolders contained in those folders. ➤ This option can insert multiple items at a time. ➤ If the scrap pane already has some items in it, the new selection will be added to it. ➤ In case of files having duplicate names, these are NOT overwritten, as they are actually at different locations.
Browse Flat	<p>Flattens folders and CIDA files.</p> <ul style="list-style-type: none"> ➤ If the selected item is a folder, x² recursively lists all files in the folder (and all its subfolders). ➤ If the selected item is a CIDA file, x² lists its contents
Cancel	<p>Cancels the right-drag operation (useful to escape)</p>

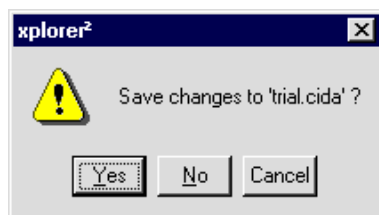
If the active pane already has some items in it, x² adds the new items to it.

Saving the contents of a scrap pane

The data is saved in the form of a file with “cida” extension. In dual-pane mode, you will need two CIDA files; one for each Scrap Pane.

To save the data, press **CTRL+S** (or use the **Actions | Write contents** menu option).

- At this time, you can save the CIDA file with UNC names of the items, so that it can be used by other PC users on the LAN for PC-independent access. To save the CIDA with UNC names of items, use the **Save as type** pull-down and select the “*UNC pidl files*” option.



If you try to close a *saved* scrap pane without saving the contents first, x² checks if changes in the scrap pane(s) are saved. If the latest changes are not saved, x² alerts you. You can either save the changes or ignore this warning, and close the scrap container without saving.

Caution: *If you try to close an **unsaved** Scrap Container, x² does not warn you if you want to save it as CIDA file(s). In a dual pane mode, to save the contents, you must use **two** CIDA files (one for each pane). If you use just one CIDA file, contents of the other pane will be lost!*

Re-loading saved contents in a scrap pane

The saved contents (i.e., in the form of a CIDA file) can be re-loaded in a scrap container. There are many ways to do this:

1. In the active folder pane, navigate to the CIDA file and press **Enter** or **SHIFT+Enter** (or d-click on it).
2. Select the CIDA file in x²'s folder pane, and then select **File | Browse flat** menu option.
3. Add the CIDA file to a scrap pane, make the scrap container dual-pane (using **CTRL+O**). Select the CIDA file in the scrap container and press **Alt+Enter**. The contents of the CIDA file will be loaded in the opposite (inactive) scrap pane.



Caution: *The existing contents of the inactive scrap pane are replaced with the CIDA file's contents. Move them to another scrap pane before this operation!*

4. Use **/F:1** command line
5. In active scrap pane, select **Actions | Load contents** menu item. A navigation box pops up. Select the CIDA file (or enter the path of a CIDA file).
6. x² maintains a list of CIDA files used in the current session. You can reload any of these CIDA files by using the menu option **Actions | Recent file**.

As soon as a CIDA file is loaded in a scrap pane, x² does the following:

1. x² checks if all items are still available.
 - If any items are deleted or moved, such items are treated as

missing. Even *renamed* items are treated as missing (x² does not attempt to trace the item's new name and correct it in the scrap pane). X² generates a list of such “missing” files in a report (described *later* in this chapter). X² also marks the underlying CIDA file as “changed”: even if you don't make any further changes in the scrap pane, when you attempt to close the scrap pane, x² will prompt you to save the CIDA file.

2. x² treats the CIDA file as open (in the current scrap pane). Any changes in the scrap pane would be treated as changes in the CIDA file. When you try to close the scrap pane, x² will prompt you to save the changes in the CIDA file.

Editing saved contents (editing a CIDA file)

To edit a CIDA file, **load it in a scrap pane**, and make changes in that scrap pane (add or delete items). Then **save** the changed CIDA file.

Even if you try to close the scrap pane without saving, x² checks if the contents are changed, and prompts you whether you want to save the changes you made in that CIDA file.



Caution: *If you flatten multiple CIDA files in a single scrap pane, x² will be able to handle only the first CIDA file, and ignore the rest. Changes in these CIDA files will be lost!*

How scrap containers reflect changes in directories

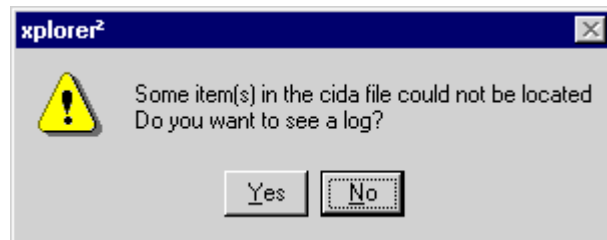
As discussed before, scrap containers actually show an *image* of the original items. Therefore, if an original item is affected by some operation (such as renaming or deletion), then the new status is immediately reflected in the scrap container. If the same item appears in multiple scrap panes, all of them will reflect the change.

Some typical examples are given below:

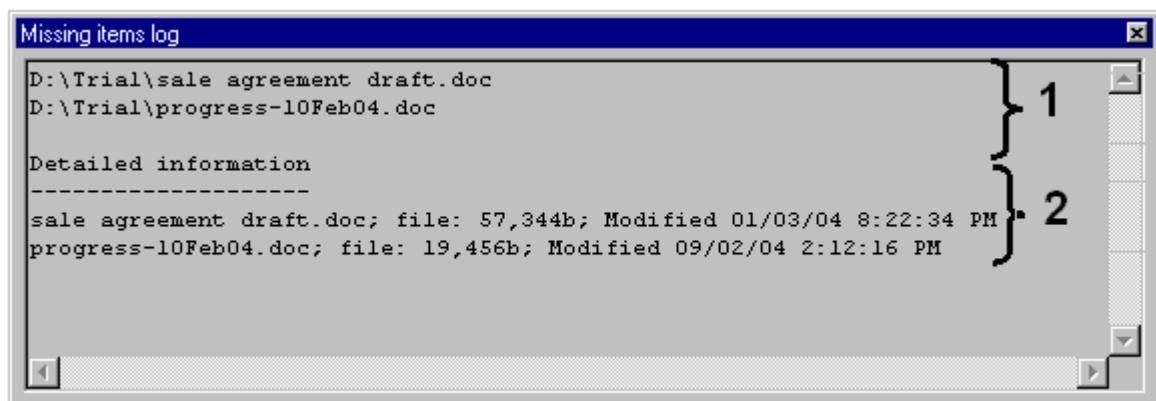
1. If an item is deleted from x²'s main **GUI** (folder pane or tree pane), then it is automatically removed from the scrap pane.
2. If a file is renamed from x²'s main **GUI** (folder pane or tree pane), then the new name will immediately appear in the scrap pane.
3. If you move an item out of its folder, then it is automatically removed from the scrap pane. The reason is that scrap pane is no longer able to “see” the item in the originally specified path. (In a way, this is equivalent to deleting the file.)
4. If you edit the path name of an item (by renaming any of the parent folders in the path), then the item will vanish from the scrap pane. Again, the reason is that scrap pane is no longer able to “see” the item in the originally specified path.
5. Flattening is a one-time operation: if new items are added to the source folder *after* it is flattened, they will not automatically get added to the scrap container. However, if you flatten the source folder once again, these new items will appear in the scrap container.

Tracing missing files

Sometimes, after saving the contents of a scrap pane as a CIDA file, you may have deleted or renamed some files. When you reload a CIDA file, x² checks if all the files are correctly available. Any renamed/deleted/moved files are treated as “missing from CIDA”, and x² prompts you if you want to see a log.



If you press **OK**, x² will provide a report as shown below. While the first part is a plain list of the missing files including paths, the second part provides details of each file, so that you can search for the missing files based on the parameters (such as size and date).



Working with multiple copies of x²

How to launch multiple copies

The tabbed interface of x² allows you to view multiple folders simultaneously in a single copy of x². In addition, you can run unlimited number of x² instances simultaneously.

But note that although you *can* launch multiple copies of x², it may not be a good idea to run concurrent operations on the disks, because Windows in general get bogged down whenever the Operating System accesses disks for Input/Output. The whole system comes to a near standstill.

Launching a second file operation in parallel will make things worse (in fact, *much* worse if both operations access the same *physical* drive). The read/write head keeps jumping back and forth to accommodate both tasks and you end up waiting far longer than the combined time of the two individual operations. Therefore it is advisable to avoid parallel operations whenever possible. Still, if you need to launch multiple copies of x², there are three different methods, each having a slightly different effect:



Click on x² button in the Quick Launch Bar. Each click launches a new copy.

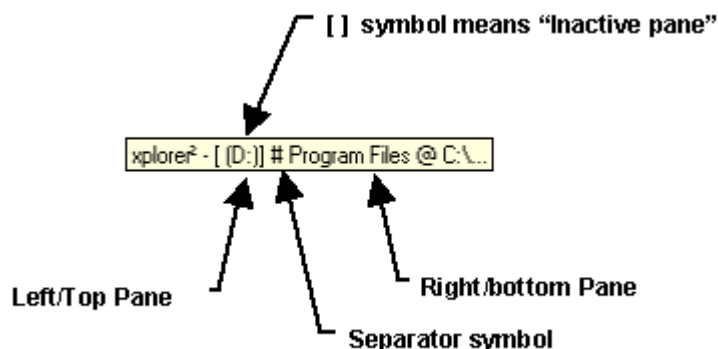
1. While using one copy of x², select a folder and press **CTRL+Enter**. A new copy of x² is launched. The new copy opens the highlighted folder in its active pane. Its inactive pane is same as the originating x².
2. While working in x², press **CTRL+N**. A new copy of x² is launched with the same folders loaded in its folder panes.

How to keep track of all running copies of x²

When multiple copies of x² are running on your PC, you can get a snapshot of all copies. You can then jump to any of these copies.

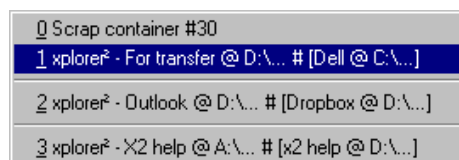
X² has two different mechanisms to manage multiple copies:

1. Hover your mouse over any x² (or **scrap containers**) icon in the task bar. An infotip pops up, as shown below.



As explained in the figure, the infotip provides you many important tips:

- Which folders are loaded in that copy of x²
 - What is loaded in the left/top pane and what is loaded in the right/bottom pane
 - Which of the two folder panes is active
2. Press **CTRL+W** to get a list of all x² windows (and also scrap panes) running on the PC. This command is useful when windows from other running programs clutter the system **ALT+TAB** list.



- You can think of this display as stack of tooltips for all copies of x² and scrap panes; because the same information is contained here. To go to the desired copy of x², either select the underlined number, or click on any desired row.

Navigating in different windows of x²

The preceding sections explained to you how to work in different parts of x² GUI. But when you use x², you will not be using these parts one at a time. Rather, you will use them *as a set*; very much like how you make a well-coordinated use of several parts of a car (clutch, accelerator, brakes, steering wheel, horn, lights, wipers, etc).

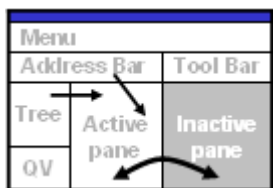
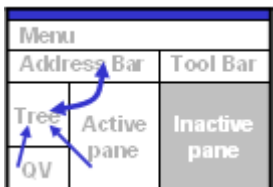
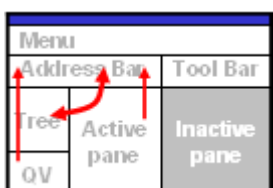
In other words, while working in a certain part of x²'s GUI, you will go to some other part of the x² GUI, do some operation there and *optionally* return to your original place. For example, when you see an interesting item in a **scrap container**, you may want to browse its parent folder in x²'s main window (because its parent folder has more items on the same subject).

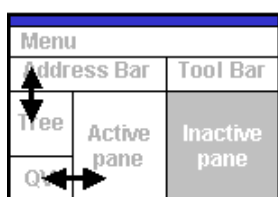
You can move to any part of any x² windows using your mouse: just click and start working. However, x² also has keyboard shortcuts that facilitates quick movements between different parts of its windows, as shown below:

Movement within x²'s main window

You can move to different parts of the x²'s main window using the following keys:

Note: In the figures, the thinner single-headed arrows show one-time movements; where as the **thicker** dual-headed arrows show the indefinitely toggling movement.

	Key combination	Remarks
 <p>The diagram shows the x² main window layout: Menu, Address Bar, Tool Bar, Tree, QV, Active pane, and Inactive pane. A single-headed arrow points from the Tree pane to the QV pane, and another single-headed arrow points from the QV pane to the Tree pane.</p>	TAB	<p>Switch from one folder pane to another</p> <ul style="list-style-type: none"> ➤ Even if your initial focus is in QuickViewer, Tree Pane or Address Bar, the focus shifts to the <i>active</i> Folder Pane. ➤ Repeat the keystroke indefinitely to toggle the focus between the folder panes
 <p>The diagram shows the x² main window layout. A blue double-headed arrow connects the Address Bar and the Tree pane, indicating a toggle movement.</p>	CTRL+TAB SHIFT+TAB	<p>Toggle the focus between Address Bar and Tree Pane.</p> <p>(Note: the shortcuts and figures are color-coded so you can spot the minor difference easily)</p> <ul style="list-style-type: none"> ➤ Even if your initial focus is in Folder Panes or QuickViewer, the focus shifts to the Address Bar and Tree Pane. ➤ The difference between CTRL+TAB and SHIFT+TAB is minor: while CTRL+TAB lands the focus in Tree Pane, SHIFT+TAB lands it in Address Bar. However, the difference ends here: when you repeat these keystrokes subsequently, <i>both</i> of them indefinitely toggle the focus between Address Bar and the Tree Pane.
 <p>The diagram shows the x² main window layout. A red double-headed arrow connects the Address Bar and the QV pane, indicating a toggle movement.</p>		

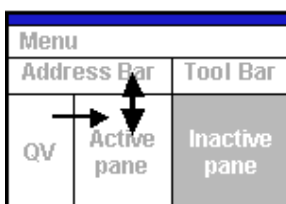
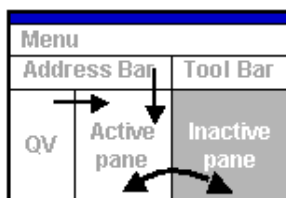


Key combination	Remarks
CTRL+SHIFT+TAB	<p>This shortcut toggles focus within a pair of panes:</p> <ul style="list-style-type: none"> ➤ Active Folder pane and QuickViewer ➤ Address Bar and Tree Pane <p>If you repeat the keystroke subsequently, the focus toggles within the concerned pair of panes indefinitely.</p>

Movement from a scrap container

In a **scrap container**, you can move using the following keys:

Note: In the figures, the thinner single-headed arrows show one-time movements; where as the **thicker** dual-headed arrows show the indefinitely toggling movement.



Key Combination	Remarks
TAB	<p>Toggle between the active and inactive scrap panes</p> <ul style="list-style-type: none"> ➤ Even if your initial focus is in QuickViewer or Address Bar, the focus shifts to the <i>active</i> Scrap Pane. ➤ Repeat the keystroke indefinitely to toggle the focus between the scrap panes
CTRL+TAB SHIFT+TAB	<p>Unlike in folder panes, both shortcuts behave identically in scrap panes: They toggle the focus between Address Bar and the <i>active</i> Scrap Pane.</p> <ul style="list-style-type: none"> ➤ Even if your initial focus is in the QuickViewer, the focus shifts to <i>Active</i> Scrap Pan ➤ Subsequent pressing of these shortcuts will toggle the focus between the Address Bar and the <i>Active</i> Scrap Pane indefinitely.
CTRL+Enter	<p>Moves the focus from a scrap container to the last opened folder pane</p> <ul style="list-style-type: none"> ➤ If your initial focus is on a <i>file</i> in the scrap pane, its parent folder is loaded in the active folder pane, and the file is highlighted. The focus shifts from the scrap pane to the active folder pane in x²'s main window. ➤ If your initial focus is on a <i>folder</i> in the scrap pane, this folder itself is loaded in the active folder pane, and the file is highlighted.
Enter	<p>Essentially moves the focus out of x² windows:</p> <ul style="list-style-type: none"> ➤ If your initial focus is on a <i>file</i> in the scrap pane, it gets launched with its default application. The focus is shifted to this opened file. ➤ If your initial focus is on a <i>folder</i> in the scrap pane, the folder is opened in a separate, free-floating explorer window. The focus shifts to that window.

Aborting an operation

Most of x² operations can be aborted simply by pressing **ESC**. Some dialog windows also have **Cancel** buttons.

Note that the command may have affected some changes in the file system before it was cancelled. This cannot be undone. For example, when a **file transfer command** is cancelled, some items may have already been moved. These items cannot be returned to their original locations.

Undo

At present, x² does not have **Undo** command (this is slated for a future version). Till that time, *prevention is better than cure!*

This manual can help you avoid situations that could cause loss of data: Read all **warnings** and **cautions** provided in this manual carefully.

Note that most of these situations are predictable, and are applicable to *any* file manager, including Windows Explorer.

A list of all warnings and cautions is provided in the **Index**.

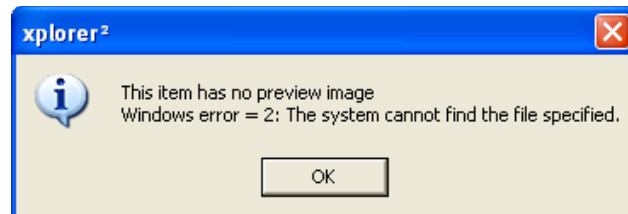
Handling the last error in the current session

When a command fails, x² shows a warning in the status bar that the command has failed; and also shows the reason for failure. The message vanishes after 5 seconds. If you are not alert, you may miss reading the message.

However, you need not worry about such lost messages: x² stores the last error that appeared in the Status Bar in the *current* session.

- x² does *not* store error messages that appear in a message window, because they require your explicit acknowledgement; and so you will never miss them in the first place.

To see the *last error* message, just use the menu option **Help | Last error**. A message box pops up, showing you the error and also some more details.



After this, you may decide to take corrective steps or just to ignore the error.

See **Appendix 9C** to see a list of some common errors and their remedies.

5. File management

In this section, we will see how to use x² for file management. This is *it*: finally we are going to drive the car on the road!

This chapter begins with day-to-day operations, such as-

- Browsing in your directories
- Opening files with their default applications
- Creating and deleting items
- Renaming items (individually and en masse)
- Changing the attributes of items
- Copying and moving the items
- Searching for files, folders and computers
- Disk operations such as formatting and labeling
- Network operations such as mapping drives

Then we will take some higher-order tasks:

- Comparing folders and directories
- Finding duplicates (and eliminating them)
- Splitting and merging files
- Managing your disk space
- Reorganizing your directories

In the **next chapter** we will see some high-power uses of x². Now that'll be like taking your car on the racetrack!

But safety first: if you have still not mastered your clutch and brake, go back to the **previous** chapter!

Browsing folders

Browsing (= reading at random) folders is the most basic function of a file manager. In fact, for basic browsing, *single-pane mode* is quite adequate; although occasionally you will find that the other pane is useful to open a subfolder and see its contents simultaneously.

But we are going to see some more exciting ways of browsing, where you can rapidly fly through multiple folders.

In the previous chapter, you have already seen how to navigate in the folder system using folder pane, address bar and tree. In this chapter, we will connect those separate movements to show how smooth the browsing experience is.

We will also see some additional tips on browsing.

In the following discussion, we will use the expression “*go to* <folder/drive>” or “*jump to* <folder/drive>” to mean ‘load it in the active folder pane’.

1. First of all, realize how easy it is to browse *multiple* folders in x²: all you have to do is launch **multiple tabs**, and load all your folders in them. With this, you are all set to browse at break-neck speeds!

Compared to browsing a *single folder at a time*, this multi-folder browsing gives you complete freedom to access several folders at a time, launch items from them (or just check them out, using the built-in **QuickViewer** and/or **Editor**²)

Users of tabbed web browsers (like Mozilla) will readily appreciate this experience. Just like in a tabbed browser, you browse by switching between tabs and going up/down in the history chains of these tabs.

And here is the best part: Did you notice the similarity in the keyboard shortcuts for both?

Switch between folder tabs	CTRL+ALT+LeftArrow CTRL+ALT+RightArrow
Go up/down history chain	ALT+LeftArrow ALT+RightArrow

And did you notice the *locations* of these keys on your keyboard?

That's right! You can use these keys like an arcade game: Just lightly place both hands on the keyboard as shown, and start using these shortcuts to fly across the tabs and their history chains!

Mainly you will use the first key group, but once in a while you will have to go into history chain of a particular tab. For that, just lift your finger from the **CTRL** key. Even to scroll up/down within a pane, you only have to move your right-hand middle finger just a little to reach out to the **UpArrow** and **DownArrow** keys.

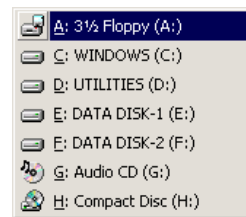
Occasionally, you will need the **Enter** key (to enter a subfolder) and **BKSP** (to go one level up). That's it!

All in all, you will need only a few keys for your browsing, as shown on the left. Once you get used to this, you will wonder how you managed without tabs!

2. The **tree** shows the entire “map” of all folders accessible from your PC (including folders shared on **NN** PCs). Therefore, it is more convenient to use the tree to jump to distant folders or between branches of a directory.
3. To find the target item of a link, press **CTRL+L** (or use **Go To | Find target** menu option).
 - If the target is a folder, x² loads it in the active pane.
 - If the target is a file, x² loads its parent folder in the active pane, and highlights the file.



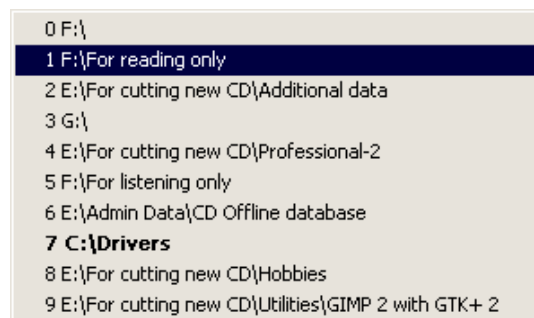
4. To go to root of a drive (a floppy drive, CD ROM, logical partition of a hard drive, etc), press **CTRL+SHIFT+<Drive letter>**. For example, to go to D:\, press **CTRL+SHIFT+D**.
 - Sometimes you may not know how many drives your PC has. For example, all mapped network folders appear as additional drives on your PC. Secondly, some programs like **Ahead Nero** and **Alcohol 120%** allow you to view the contents of CD image files (with extensions like iso, nrg, etc) by mounting them as virtual drives. As drives are added/removed, Windows re-allocates drive letters. You can ask x² to show a list of all current “drives” by pressing **ALT+F₁** (or select **Go To | Select drives...** menu option). A list like this pops up:



To go to any of these drives, click on it, or press the underlined letter. (Example: to go to the audio CD, press **G** on your keyboard.)



(Note: the actual list will keep changing, depending on how many drives you have mapped, and how many CD images you are using at any moment.)

5. Pressing **ALT+F₂** (or selecting the **Go To | Recent folder** menu option) will show you a list of all **recently browsed folders** in that pane.



To go to any folder, either press the number (0-9) shown against the folder, click on it or move the highlight to the desired folder (using the up/down arrows) and then press **ENTER**.

6. Windows has some special folders, where you can carry out specific operations. You can go to these special folders using **Go to | Special folders** menu option. The function of these special folders is explained below:

Special folder	What you can do there
My documents	Your personal documents (Each user of the computer will have a different list)
Recent items	Documents and folders accessed recently. This list is also accessible from the  menu (“Recent documents” option). <ul style="list-style-type: none"> ➤ Edit the list to reduce clutter. ➤ Add new shortcuts (<i>favorites</i>).
Recycle bin	Shows a list of deleted items. You can either recover the items from the recycle bin, or delete them permanently.
Desktop	Folder representing your PC’s desktop. <ul style="list-style-type: none"> ➤ You can place shortcuts to folders, files and programs used on daily basis.
Root	Root of the current directory (e.g. D:\)
My computer	Shows all local and mapped drives. See total storage capacity and free capacity of all drives at a glance.
Network	Computers connected to this computer (through a LAN)
Control panel	Settings for the computer can be controlled here. Some shell extension programs add their settings here. (This is the only place to change their settings.)
Printers	All available printers. Virtual printers like “pdf995” (which actually creates a pdf file) are also listed.
Start menu	Folder representing the  button.
Startup	Programs that start automatically every time you log on. (Note: some programs use some different mechanisms to auto-start, so this list will not be exhaustive: you will find that some programs <i>not</i> listed here <u>also</u> start at log on. However, you can add new programs here to make them start automatically.)
CD burning	Items waiting to be written to CD (Windows XP only). Note that only <i>shortcuts</i> are stored here; not the original items.
Send to	Targets appearing in the <i>send to-</i> shell context menu. You can add new programs to this list (or remove some from this list).

Viewing files with the QuickViewer

With Windows Explorer, you will have to open (or play) each file to confirm whether *that's* the file you want.

In x², you can have a quick glimpse of the focused file in the **QuickViewer**, so that you can identify the file easily without having to open it with its default application. This is a tremendous timesaver.

- The QuickViewer is especially helpful for images, audio, video, HTML, text (including RTF, DOC and TXT files) and PowerPoint files. It displays/plays the beginning of these files.
 - In case of the audio and video files, the QV offers basic controls (play, pause, stop, next track, previous track).
- Other types of files (such as pdf, zip, exe, excel, etc) are decoded, and their code is displayed in Hex and ASCII format. Here too, you can read the embedded text/comments and make a quick judgment about the file.
 - If you have installed the **Ifilter** plugins, QuickViewer shows unformatted text of the PDF, CAB, CHM, HLP and ZIP files (Windows 2000/XP/2003 only)

When in text preview mode, QuickViewer allows you to search for text just like a text editor. You can also copy text and images using the context menu (right-click anywhere in the QuickViewer pane).

QuickViewer also provides a preview for a variety of graphic formats.

When the folder pane is set to **thumbnail view** style, it can also show you a preview, but the QuickViewer has an advantage: It can be resized to occupy almost the entire screen. (On the other hand, the *thumbnail view* has its own advantage: It can show you *multiple* items at a time.)

View files like a slideshow

Using the Quickviewer, you can view the files like a *manually* advanced slideshow: Just maximize the Quickviewer and then change **program options** to view the **Index Number pane**. Now you are ready for your “slideshow”.

When you view the files in the Quickviewer, the **status bar** shows the file's number, like the slide number in a slide show. The total number of items in the folder are shown in the next pane. Put together, it is the equivalent of “slide *x* of *y*” display shown in a slideshow application.



For example, the screenshot on the left shows the equivalent of “slide 12 of 50”.

Viewing files with Editor²

After viewing a text-based file with the QuickViewer, you may decide to have a more detailed look at the file. x² has a built-in companion product called Editor² that can be used to view or edit the text-based files.

- To view the selected file in *read-only* mode, press **F3**. (This mode is useful to preserve the original file by preventing any accidental

changes to the file.)

- To view and edit the selected file, press **F4**.

For detailed help on Editor², see **Appendix 9Q**.

Using bookmarks

You may have a few favorite folders that you browse frequently. You can ask x² to remember their locations, so that you can go there quickly and start browsing. This is equivalent of *speed dialing* feature in your phone.

x² remembers these locations as “bookmarks”. Once you define a bookmark, you can jump to it by pressing its keyboard shortcut (if you have defined a shortcut for this bookmark), or using the **Bookmark** menu. For each bookmarked folder, x² remembers three things:

Item	What is registered?
Path	The bookmarked folder’s path
Name	A name for each favorite folder (select any name that is relevant to the bookmarked folder and also easy to remember) Note: Defining a name for a shortcut is optional. If you don’t define a name, x ² will take the path as name.
Shortcut	A keyboard shortcut that will load the bookmarked folder in the active folder pane. Note: Defining a shortcut for a bookmark is optional.

There are two different mechanisms to create bookmarks:

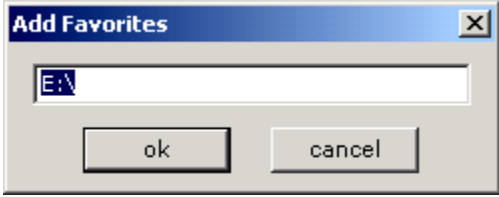
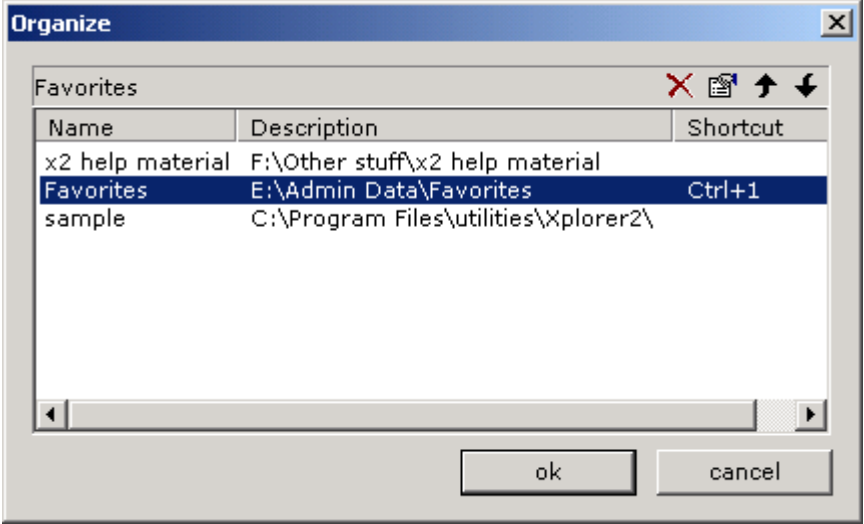




1. Using the **Bookmark** menu
2. Store all favorite shortcuts in a folder (and bookmark this folder itself, so you can easily reach it).

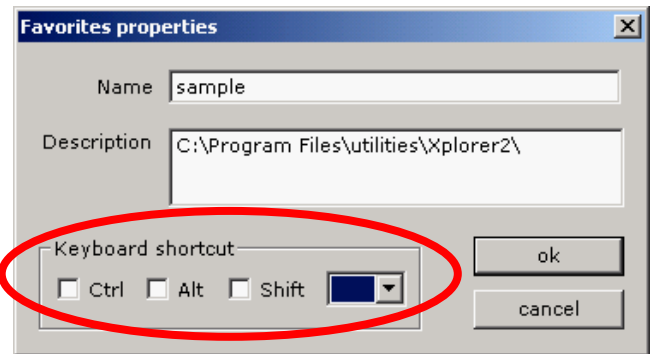
You can use both methods simultaneously.

Both methods are explained below:

Using the Bookmarks menu

In this method, bookmarks are managed using the **Bookmarks** menu.

Adding bookmarks	<p>When you have a folder open in the active folder pane, use the Bookmarks Add menu option. A dialog box pops up:</p>  <p>The current folder's path is shown here. You can save it as it is, but it is better to give a distinct functional name to each favorite. This name appears in the bookmarks menu.</p> <p>You can create 100 bookmarks this way.</p>
Organizing bookmarks	<p>Select the Bookmarks Organize... menu option. The following organizer window appears:</p> 
	<ol style="list-style-type: none"> 1. To delete any bookmark, select it and press DEL (or press the  button) 2. To move any favorite up or down in the Bookmarks menu, select it and press  or . 3. To change the bookmarks name, path or keyboard shortcut, double-click on it (or press the  button). The following dialog box pops up:



Click in any field and edit the entry.

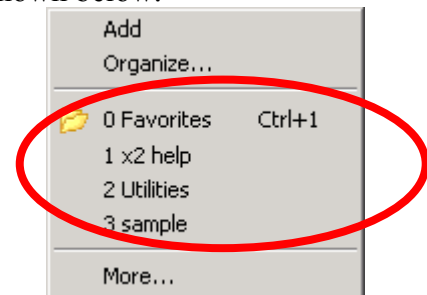
You can also define/edit the keyboard shortcut for the favorite folder by using the controls highlighted in the red oval. (For example, if you put a tick in the CTRL and ALT checkboxes, and select 5 from the pull down menu, the favorite has a new keyboard shortcut of **CTRL+ALT+5**.)

The new settings will take effect only when you press **OK**.

Tip: Normally, bookmarks point to folders. But you can have bookmarks on favorite *files* also: First create a bookmark to the file's parent folder and then edit the bookmark's **description** field. Append the filename in the path. Now the bookmark will select this file!

Jumping to a bookmark

Click on the **Bookmarks** menu. All the bookmarks pop up as shown below:

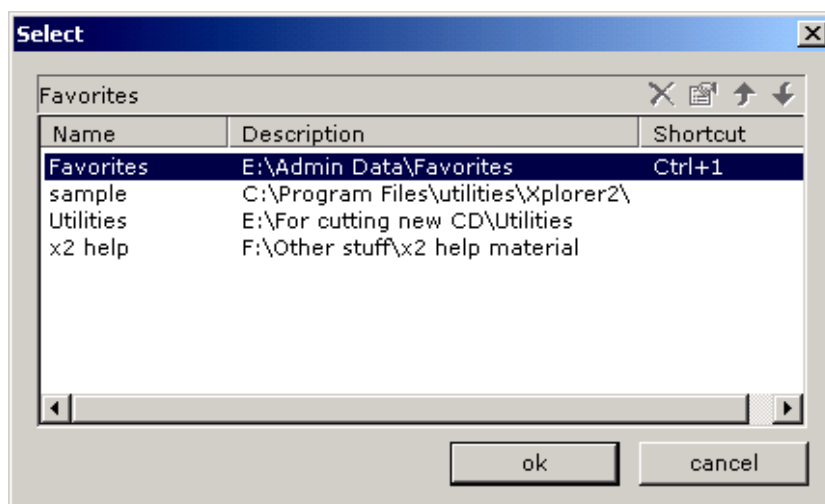


Note that the menu displays all bookmarks in the same sequence as in the **Organize** window (shown above).

To jump to any bookmark, either click on it or press the number shown opposite it.

If the bookmark has a keyboard shortcut assigned to it, you can use it directly (*without* launching the **Bookmarks** menu).

If you click on the **More...** option, the following dialog box pops up, showing the complete list of bookmarks — useful when you have more than 20 bookmarks and the menu is full.



Click on any bookmark to load it in the active folder pane.

Tip: With the pro version you can add the first 20 bookmarks on any toolbar for easy access. So if you want quick access to the root folders A:\, C:\, D:\ etc, you can create bookmarks to them and add them on a separate toolbar, thus simulating your own drive bar!

Using bookmarks stored in a folder

Well, this is not really a totally independent scheme- actually it depends on the bookmark menu, as explained below:

In this method, the favorites are managed by storing their links in a folder. For best results, create a dedicated folder that stores the links to all your favorite locations. Name this folder “*Favorites*” (or give any name you fancy). Add this folder to the bookmarks menu (using the **Bookmarks | Add** menu option). Assign a keyboard shortcut to it (I recommend **CTRL+0**) using the technique described above.

Now you are ready to add more bookmarks.

To do this-follow these steps:
Adding bookmarks	<p>In one folder pane, open the <i>parent folder</i> of the item(s) you want to bookmark. In the opposite pane, open the Favorites folder (to open the folder, you can use the keyboard shortcut).</p> <p>Now drag-n-drop links of the bookmarked items to the Favorites folder (to create a link, press CTRL+SHIFT while dragging the item).</p>
Organizing bookmarks	<p>Open the Favorites folder, and edit the name of each link. (Note that when you edit the name of a link, its target path remains unchanged. You can exploit this fact to give a normal recognizable name to each favorite.)</p> <p>Since this is a normal folder containing only links, you can sort all items based on names.</p>
Jumping to favorites	<p>First open the Favorites folder in the active folder pane. (Use the keyboard shortcut assigned to this folder). Once it opens in the active folder pane, select the desired favorite and click on it (or press ENTER). The bookmarked folder will open in the active folder pane. (The favorites are opened in two jumps).</p> <p>You can even share bookmarks over a LAN. Just prepare a folder with links and share it over LAN. If the other users also have x², they can set up this folder as one of their bookmarks.</p>

Using a Quick Bookmark

The two methods described above provide you with long-term favorite locations.

However, sometimes you need to jump to only a *temporarily* favorite location. You may not want to remember this location as a long-term favorite.

For example, suppose you are editing/renaming files in a large directory, and you have finished work till a certain subfolder in this directory. You want to

stop work here, and continue working in the same subfolder the next day.

For this, you have to mark this subfolder as a temporary favorite. But tomorrow, once you resume your work, you will no longer need to remember this subfolder.

x² provides a temporary (reusable) bookmark called **Quick Bookmark**, for such purposes.

- To store the active folder as Quick Bookmark, press **CTRL+SHIFT+F₁** (or use the **Go to | Set quick-mark** menu option).
- To jump to the quick bookmark, press **CTRL+F₁** (or use the **Go to | Quick Bookmark** menu option).



Tip: Rather than using the Quick Bookmark, you can open this “*temporarily favorite*” folder in an **additional tab** for, and switch to that tab whenever you want. You can also **save the tab group**, so that when you restart x² (or the PC), you can re-load the tabs.

Opening files and starting applications

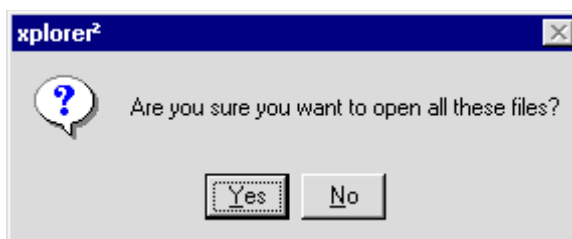
Opening with default application

Select a file and press **Enter** (or d-click on it). The file will be opened with its default application. For example, a file with “doc” extension will be opened in Microsoft Word.

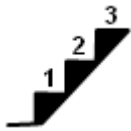
Rather than opening each file separately, you can open multiple files simultaneously. This is a tremendous time-saver. After making the selection, press **Enter** (or select the **File | Browse** menu option).

Windows will first confirm whether you indeed want to open multiple documents simultaneously. If you confirm, all the selected files will be opened.

- If these files are associated with different applications, these applications will be launched and each file will be opened in its default application.
- If you have selected more than 10 items, x² will confirm whether you *really* intend to launch all these files.



This is to make sure that you do not launch too many items by mistake.



Open with... options

Sometimes, it is necessary to open a file with an application that is not associated with the file by default. For example, the MIDI files on your PC may be associated with a player. If you want to *open* a MIDI file with a MIDI editor program, rather than *playing* it with its default application, then this option is useful.

To do that-

1. Select the file
2. Press **SHIFT** and r-click on the file. A context menu appears.
3. The context menu has an **Open with..** option. Select this option.
4. Navigate to the desired application and press **OK**.

Creating new files, folders, shortcuts and links

Creating a new file

To create a new file, press **F₇** (or select the **Actions | New file** menu option). A new entry pops up in the active pane; and x² goes in *rename* mode.



The dummy name “New file” is already highlighted: just enter a proper name and extension for the new file and press **Enter**.

Do not forget to enter the extension; otherwise the file will not be associated with any application, and remain useless! But not to worry: you can enter the extension even afterwards. Just select this file, press **CTRL+F₂** and enter the extension. Also remember to enter the dot (.) between the base name and the extension!

Note that the file you create is really an empty file: x² does *not* insert the appropriate file-header in this file. That is done only when you edit the file with its associated application.

Creating a new folder



To create a new folder, press **F₈** (or select the **Actions | New folder** menu option). A new entry pops up in the active pane; and x² goes in *rename* mode.

The dummy name “New folder” is already highlighted: just enter a name for the new folder and press **Enter**.

Creating a shortcut

Usually, All your files and folders are organized in a directory structure that reflects your subjects and topics (see [Chapter-8](#) for tips on how to organize your directories).

Normally this is not a problem, but if some file or folder covers multiple subjects, you face a dilemma as to where to place this item.

Your knee-jerk reaction would be to place one copy of the item in each directory. But these duplicates waste valuable disk space. Besides, when you edit the item (or replace it with the latest version), you may forget to update

all the other copies simultaneously.

The solution is to place the item in the most relevant folder, and place its *shortcut* in all other candidate folders.

A *shortcut* is actually a tiny file with “*lnk*” extension (abbreviation of “link”). It only contains a reference to the actual file (or folder).

(Note that the term *shortcut* is also used to mean a combination of keys on the keyboard, such as **CTRL+F**).



The icon of a shortcut is derived from the item it points at. In fact, it has the *same* icon, with a small arrow added at the left hand bottom. This makes it easy to recognize the target item’s type at a glance.

What happens when you click on a shortcut?

- If it points to a folder, x² loads the folder in the active pane.
- If it points to a file, x² launches the file using its default application

The link between the original item and its shortcut remains intact even when you carry out many operations on the shortcut and/or its original item:

1. Rename the shortcut
2. Move a shortcut to another folder, directory or a **NN** PC.
3. Create a copy of the shortcut. (Even the new copy of the shortcut will point at the original item.)
4. Rename the *original* item
5. Move the *original* item to a new location

The only condition is that the item *and* its shortcut must be accessible *simultaneously* when these changes are carried out.

For example, if you move a shortcut to a floppy, remove the floppy and do any of the operations on the original item. When you insert the floppy again, you will find that the link is broken. For the same reason, if you have shortcuts pointing at items on remote PCs, they may not work reliably!

How to create a shortcut:

Shortcuts are created using drag-n-drop operation. Since this operation can also copy/move items, creation of shortcut is described in a **later section**.

Creating hard links

A hard link is just like a hyperlink in the sense that when you click on the link, the original item is opened. However, while a hyperlink can be created inside a document, the hard link is created in the folder system. Once created, the link can be renamed, deleted and moved like any other item.

This is an extremely powerful and space-efficient concept that allows you to have many copies to the same file in different locations without using any extra storage. When you change one copy all the other instances are automatically updated.

To create a hard link, focus on an item and then press **CTRL+ALT+H** (or select **Paste special | Hard link** menu option).

You can create a hard link for folders also, and then the complete hierarchy below the folder is hard linked — but this shouldn’t be confused with folder



junction points. When x² hard links a folder, it creates real folders but instead of files, inserts hard links of the originals.

Tip: Hard links are available for NTFS-formatted hard disks only. Secondly, the source files must be on the same partition.

You can check whether a drive is NTFS-formatted using its property sheet. From “My Computer” right-click on the drive in question and read the Type field from **Properties | General**. Generally speaking, only drives on NT-based PCs have any chance of being NTFS: windows 9x only support FAT32.

Deleting files or folders

Deleting files and folders

It is not enough to just remove a file from a collection: you must think of the consequences if someone manages to recover that deleted file from the Recycle Bin or from the disk.

x² provides three different degrees of deletion:

Just press **Delete** (or use **File | Delete** menu) to delete the selection. The collection is sent to Recycle Bin. This is a safety precaution against accidental deletion: you can retrieve any item from the Recycle Bin. But once you empty the Recycle Bin, the items cannot be retrieved.



Caution: *If the selection is too large for the Recycle Bin, the Recycle Bin is bypassed during deletion. Such items cannot be recovered later. Before deleting, x² warns the user about this, but if you press OK, it goes ahead with the deletion. So, do not be hasty with that Enter key!*

- If you don't want to send items to Recycle Bin, delete the selection with **SHIFT+Del**. The Recycle Bin is bypassed while deleting.
- Even if you bypass the Recycle Bin, the data is not safely erased: Special disk recovery processes can recover deleted files. If you don't want that, you can use a special menu command **Actions | Shred**. Now the file is truly erased from the disk; and no operation can recover it!



Caution: *Before using the shred command, make sure that you really do not want the items. Once shredded, they will be lost forever!*



Tip: You can't delete a folder from the tree if you are browsing that folder in one of the list view panes. In this case, it is considered “locked” and you can't permanently delete it. So please make sure you are not browsing the folder in any program, including within x². You should be able to delete a folder to the recycle bin without problems, though.



Using the Recycle Bin

You can browse the **Recycle Bin** like any other folder.

- Load it in a folder pane and browse it to see what items are earmarked for deletion. It is a good idea to **sort** them on “path” or “Deleted date” columns and then browse the entire collection.
- If you want to undelete any of these items, just select those items and r-click. From the context menu that pops up, select “Restore”.
- To remove the selected items permanently from the **Recycle Bin**, press **Delete**.
- To remove all items from the **Recycle Bin** at once, r-click the **Recycle Bin node** in the tree and select **Empty Recycle Bin** option.

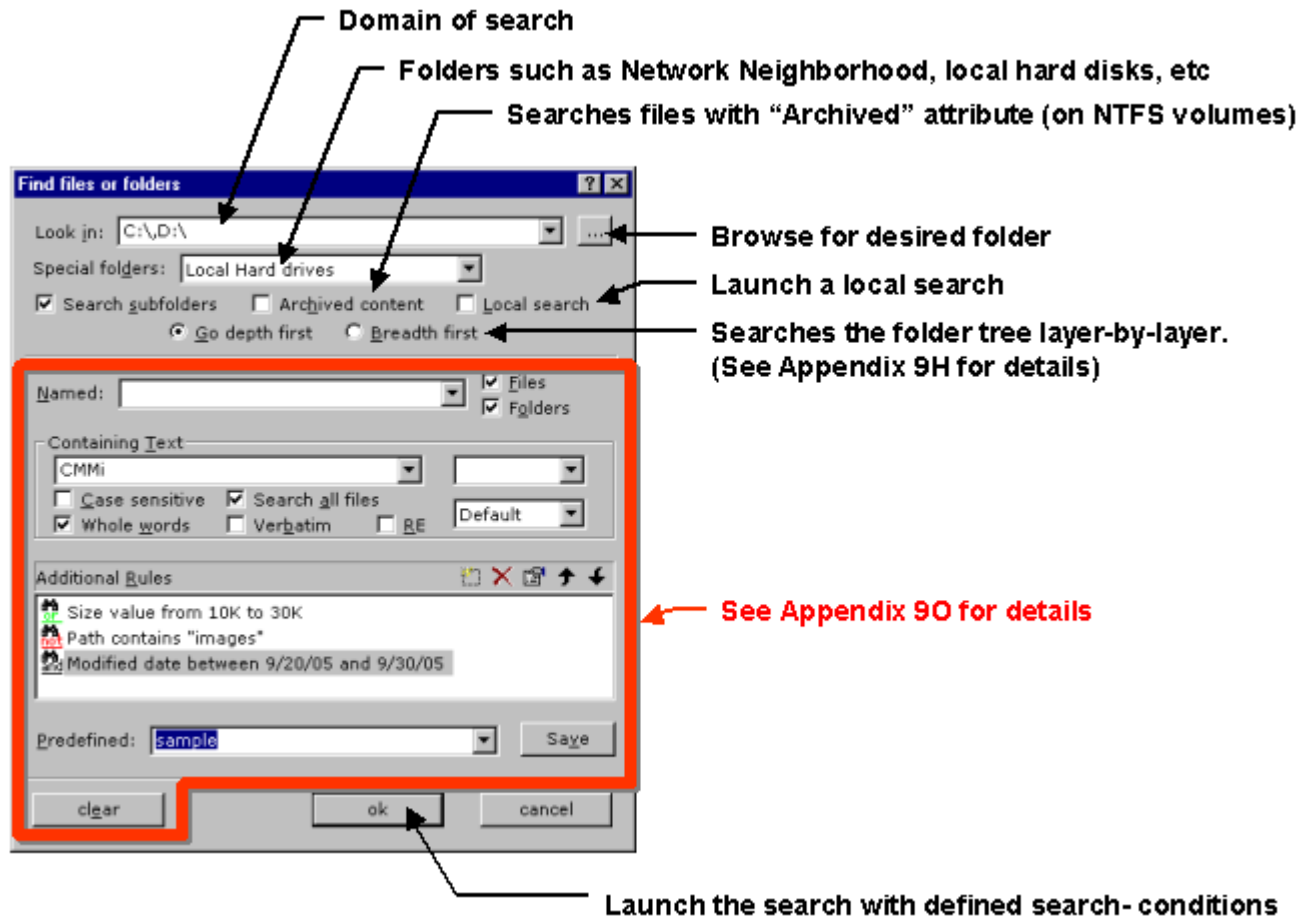


Caution: *x² cannot automatically refresh the contents of Recycle Bin. So, even if you delete or restore any item(s), those item(s) will still appear in the Recycle Bin. You will have to manually refresh the view (press CTRL+R or CTRL+ALT+Space Bar) to get rid of these items.*

Finding files, folders and computers

The **Find Files or Folders** command (launched with **CTRL+F**) locates files, folders and computers in the network neighborhood. You can specify a complex set of rules that the searched item must meet.

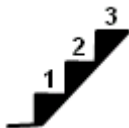
The window of **CTRL+F** command is shown below. It has many elements common with other commands. These common elements are explained in **Appendix 90**. The remaining features are explained below.



You can use this command in x²'s main window or in a **scrap container** window. The latter is called **local search**, described in the next section.


Composing a search

The step-by-step procedure to use this command in the main x² window is given below (refer to the figure above):



1. Start by defining the search domain with the help of **Look in...** or **Special folders** fields, located at the top of the window.

By default, the **Look in...** field shows the current folder pane's path automatically (in other words, the current folder pane is the default search domain). You can change the search domain as follows:

- You can change the path defined in the **Look in...** field: either type in a new path or press the **browse** button  to locate the folder you want to search.
- If you want to search *multiple* paths, enter them all in the **Look in...** field (separate them with commas).
- The **special folders** field has a pull-down list of some commonly used search domains (NN, all local hard disks, etc). If you select anything here, the entries in the main **Look in...** field are ignored.
 - Note that the **special folders** field allows only *one* selection at a time: it does not allow multiple entries (e.g. you can't select all hard disks and NN options together). That means you will have to run separate searches for each option

selected from here.

2. Next, select your search options:

Search subfolders	If selected, contents of all subfolders will be searched <i>recursively</i> .
Archived contents	If selected, x ² searches within archive files (zip, etc) (if supported as folders by your system) and other special types of folders, such as FTP, webfolders, etc. (Searching archives is kept optional because it is a time-consuming process, and slows down the search.)
Local search	Forces a local search
Depth-first Breadth-first	x ² can conduct the search in two distinct ways: <ul style="list-style-type: none"> ➤ In the <i>Depth-first</i> mode, x² goes deep within each folder and finishes off all subfolders. ➤ In the <i>Width-first</i> mode, x² searches layer-by-layer: first it searches in the top folder, and then searches all subfolders one layer down, and so on. <p>See Appendix 9H for details.</p>

3. Complete the middle section as explained in **Appendix 9O**.

4. Press the **OK** button to launch the search.

5. The search results (i.e., items found with this command) are listed in a **scrap pane**:

- If there is no scrap container, the **CTRL+F** command will create a scrap container and put the search results in its active pane.
- Even when you are working in an existing scrap pane (and not on x²), you can still launch a new search in x², in any folder(s) of your choice. In this case, x² does *not* open a new scrap pane: instead, x² will overwrite the existing contents of your current scrap pane.



Warning: *You might lose the existing contents of your current scrap pane!*

- If a scrap container is open, the **CTRL+F** window automatically focuses on its active pane.
 - If the active pane is has some entries in it, **CTRL+F** will automatically switch to “**local search**” mode. If you don’t want to launch a local search, then uncheck the **local search** checkbox.



The new results will overwrite the existing contents of the active scrap pane.

Warning: *You might lose the existing contents of your current scrap pane!*

- If the active scrap pane is blank, **CTRL+F** will focus on the current copy of x² and search in its active folder pane.

Notes:

- A search command slows down x² (the main window and the scrap container). So, if you plan to do some other file-management work while the search goes on, launch a new x² window (using the **Window | Clone** command) *before* you start a search. This clone will run in its own thread and will be relatively unaffected and more responsive to user input. Still it *does* slow down the PC. Sometimes patience is the best policy!
- You can check the progress of a search either by noticing the folder being scanned on the status bar, or see the detailed **search status report**.

This information is available even after the conclusion of the search.

- Multiple additional rules can slow down a search. To speed up the searches, x² automatically checks easier rules first and leaves slow ones for last, thus optimizing searches as much as possible. You need not worry about setting the rules in correct order.
 - If you are searching for some text, this information is instantly shared with **QuickViewer** and **Editor²**. So, when you view the items listed in the search results with QuickViewer and Editor². The first match of the text is already highlighted in QuickViewer and Editor². You can see other matches by pressing **F₃**.

Saving the search results

The results of a search are collected in a scrap pane. You can **save the scrap pane's contents** as a CIDA file. However, it does not save the search conditions along with the file. So, when you see the saved search results (in the CIDA file), you will *not* know how those results were collected.



Tip: You can “embed” some of the search-related information (such as the subject, search conditions, search domain, date of search, etc.) in the CIDA file's name itself. For example, **MIDIs_NN_Jan05.cida** contains your search results for MIDI (music) files in your NN.

In fact, the CIDA file is not meant to save individual search results only: you can remove some items from the search results, add some more items manually, or even combine the results of several searches in a single scrap pane and then save these modified contents as a CIDA file. Name such “modified” CIDA file appropriately, so that you will not confuse it with a pure search result. If the CIDA file is stored on an NTFS drive, you may attach **comments** to it, to describe how you created it.

Local searches

Normally, x² searches in the specified folders as described **above**. However, sometimes we need a *local* search within a scrap pane.

Typical applications of a local search are-

- Searching within the results of an earlier **search**; and
- Searching in a **scrap pane** that was manually loaded; by any combination of the following methods:
 - **Flattening** some folders
 - **Adding items to the scrap pane** from various directories
 - The results of an earlier **search**.

To set x² in “Local search” mode, put a tick in **Local search** checkbox and launch the search.

There are four important differences between a “normal” search and a local search:

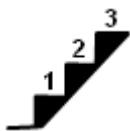
Difference	Search type	
	“Normal” search	Local search
Domain of search	Active <u>folder</u> pane	Active <u>scrap</u> pane
Search subfolders in	All subfolders and files are searched.	Only the names of subfolders are searched; their contents are <i>not</i> searched. Tip: If you want to search <i>inside</i> a subfolder, flatten it first.
How the result is displayed	Matching items are listed in a new scrap pane	Matching items are highlighted in the scrap pane itself.
Saving the results	Save as a CIDA file.	The results cannot be saved directly: first transfer the highlighted items into a fresh scrap pane and then save it .



Skipping some folders during search

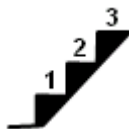
You can tell x² to skip certain areas during a search; generally because you know these areas don't hold anything of interest (so you can save time by skipping them), or to deliberately avoid accessing some sensitive information. There are two different provisions for skipping an area during a search:

Area type	Remarks
Blacklisted area	<ul style="list-style-type: none"> ➤ These areas are always skipped during searches. If you take any area out of this blacklist, x² will start searching in it. ➤ Once defined, a Blacklist is valid for all searches (it is not separately defined for each search). ➤ Once defined, the Blacklist is remembered even when x² and the PC are closed and restarted.
Excluded area	<ul style="list-style-type: none"> ➤ User has to define excluded areas for each search separately. ➤ The excluded areas are applicable only to that particular search: If there are other searches running in parallel, they will not skip these areas. ➤ Once a search is over, the excluded area list is lost. If you want to use the excluded areas time and again, save the search.



To add an area to blacklist:

1. Close all running copies of x² (including scrap panes, if any)
2. Using a registry editor, navigate to **HKEY_CURRENT_USER\Software\ZabaraKatranemia Plc\explorer2.global\Find Blacklist** folder.
3. You will see some default values here (labeled 00, 01, etc.). Add a new value (you should label it as the next available number). Specify the path of the area to be blacklisted.
4. Press **OK**, and exit the registry editor
5. Start x². The area is blacklisted now: it will always be skipped.



➤ To remove an area from blacklist:

1. Close all running copies of x² including scrap panes
2. Using a registry editor, navigate to **HKEY_CURRENT_USER\Software\ZabaraKatranemia Plc\explorer2.global\Find Blacklist** folder.
3. Select the area to be removed from blacklist and delete this value.
4. Adjust the numbers of the remaining entries so that they form an ordered list from 00 to (number of blacklisted folders-1).
5. Press **OK** to confirm and exit the registry
6. Start x². The area is no longer blacklisted.

➤ To exclude an area from an individual search:

After specifying your search domain in the “**Look in..**” field, enter a

Repeating a search

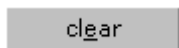
All details entered in the **CTRL+F** dialog box are saved by default: When you launch the **CTRL+F** command again, you will see all the previously entered details, including the additional rules.

Only two things are *not* retained from the last search:

1. The search domain: The **Look in...** field always re-focuses on the *current* folder pane; and so it replaces the last entries with the current folder pane's path. However, changing it is easy: The last entries are still available from the **Look in...** field's pull-down menu. You can select them once again.
2. The *name* of the item you want to find. In fact, notice that x² has already highlighted the entries in the **Named** field. Simply start typing the new name(s)!

This is a tremendous time-saver, because you don't have to enter all the details again: At the most, you have to only edit some fields.

But just in case you *do* need to start an entirely new search, simply use the **Clear** button at the bottom of the dialog box. All entries (including additional rules) will be cleared, so that you can start afresh.



- All the past entries are still available through the pull-down lists
- The **Look In...** field is *not* reset: you will have to tell x² specifically where to look.

Saving search conditions and re-using them

If you have to repeat the same search often, you can save the entire set of search conditions under a unique name. Note that this is quite different from *saving the search results*: here, we save the *criteria* (*search conditions*); so that we can reuse the search.

To save a search-

1. Click in the “Predefined” combo and type a name (select a name that helps you remember why you want to save these search conditions).
2. Press the **Save** button.

All such saved searches appear in a pull-down menu of the search (**CTRL+F**) command. You can select any of the previously saved searches, modify any of the search parameters and then run the search. Changing the parameters at runtime does not change the original saved search.

Typical uses of saved searches are:

- To compose a “subject search”, consisting of all possible keywords for any given subject. Save such search and reuse it periodically to search for all files on that subject. Good for searching your collection and LAN for subjects of your interest.
- To use the saved search as a search template; so that you don't have to fill in a lot of details each time. In this application, the saved search contains all commonly used values; and many fields are left blank (to be filled at the time of running the search).

- To search a remote PC or server on your LAN periodically and compare the latest results with the earlier results, to check if any new files are added to it. In this case, you typically define and save all search conditions and search domains.

Copying and moving folders and files

Because of the dual-pane structure of x², copying and moving files is extremely easy: the active pane acts as source and the inactive pane acts as the destination.

x² also has powerful commands to copy/move the selection to any of the tabs or even an unlimited number of pre-defined folders.

Broadly, the process can be described as follows:

After selecting the files in the source pane, use any of the following methods:

- Using mouse, **drag-n-drop** the selection to the destination
- Use x²'s **Robust File Transfer** commands (Press F₅ or F₆)
- Copy the selection, go to the destination folder and paste the selection there.
- Make a bundle, take the bundle to the destination and unbundle.

The following sections describe each of these methods in detail.

Using the drag-and-drop method

You can reach the destination folder through three different routes. Each route has a particular advantage:

Target-	Specific advantage
Folder pane	<p>The “background” area in the pane and pane header act as drop targets.</p> <p>While dragging in a pane with many items, you can scroll the contents by hovering on the window edge closest to the direction you want to see revealed.</p> <p>You can also drop the selection in any subfolder listed in the pane.</p>
Tabs	<p>The tabs (in the Tab Bar) <i>themselves</i> are drop targets. You can drop your selection on <i>any</i> tab, located either in the active pane or in the inactive pane. The selection will be transferred to the folder that is loaded in the respective tab. You can also drop the selection in any subfolder listed in the pane.</p> <p>➤ You do <i>not</i> need to open the destination tab before transferring your selection. (In other words, the destination folder pane need not be on top of the stack.) This allows you to transfer files at much faster speed.</p>



	<p>➤ Sometimes, you may want to check the contents of the destination tab before dropping your selection there. In that case, just hover your mouse on the tab, and after a preset delay, the tab will automatically open. If you move the mouse laterally, the neighboring tab will open up. If you wish, check out all tabs this way. When you have found the correct tab, just release the RMB to complete the transfer.</p>
Tree	<p>The tree gives you a panoramic view of all the folders available in your PC and even the entire NN.</p> <p>While carrying your selection, cross over to the tree pane and locate your destination folder's node. Drop your selection on it.</p> <p>The tree has <i>open-on-hover</i> feature: while dragging your selection, hover on a node to open it up. This way, you can go down a path and transfer your selection to any node.</p> <p>While dragging in a tree with many nodes, you can scroll in any direction by hovering on the Tree pane's edge closest to the direction you want to see revealed.</p>

The drag-n-drop operation can do three different jobs for you:

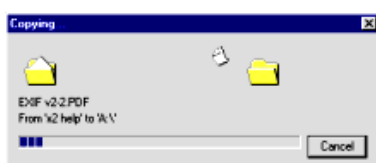
- *Copy* the selection to the destination folder,
- *Move* the selection to the destination folder or
- *Create shortcuts* for all items in the selection in the destination folder.
- If you don't do anything other than drag-n-drop, x² will decide what to do: if the source and destination folders are on different logical drives, x² will *copy* the selection; otherwise it will *move* the selection. (You can't create shortcuts with a plain drag-n-drop.)

To select an option *manually*, follow one of the following methods:

- Press and hold down a “*drag-modifier*” key while you drag. Each modifier key achieves a different effect:

SHIFT	Always <i>moves</i> the selection
CTRL	Always <i>copies</i> the selection
SHIFT+CTRL	Always <i>creates shortcuts</i> of the selected items. (When you complete the drag-n-drop operation in the destination folder, only the shortcuts are dropped there, not the actual items.)

- Start the drag with *RMB* (not LMB as usual). When you drop, you'll be presented with an *options* menu. Select the option you want.



For the actual transfer, x² uses the file-transfer engine of Microsoft Windows. During the actual file transfer, an Explorer-like window shows the current status.

Using Robust File Transfer commands

x²'s **robust file transfer** commands have several advantages over the default (Windows) file transfer:

1. If errors occur during the transfer, the transfer is not aborted (or even halted for your instructions): You can ask x² to create a log of these errors and carry on, so that you can deal with the errors later.
2. In case the destination folder already has an item with the same name, x² can rename the transferred files *on the fly*. (The original is not affected.)
3. You can set x² to overwrite files with the same names and “*Read only*” files without asking for a confirmation each time. The overwrite function has an additional “*No to all*” option.
4. If you set the file transfer as a *background* task, the transfer task becomes less aggressive, which in turn frees more system resources for the other tasks of x², making them run faster.
5. You can pause the transfer midway and resume it later. This is useful if you have to create some disk space (by deleting some other items), finish some other resource-consuming task first, disconnect your PC from LAN for a while, etc.
6. If the destination (removable) disk becomes full during the transfer, x² will not abort the transfer: it will allow you to change the disk and then continue. On the other hand, if you do *not* want to split your load over different disks, you can ask x² to check the disk space *before* starting the actual transfer.
7. When files are copied from CDs, Windows Explorer automatically marks them *read-only*. If you want to edit them, you have to first reset their *read-only* attribute. On the other hand, x² can automatically reset the *read-only* attribute during transfer.
8. It has an “overwrite newer else skip” option, which can act as a quick *automatic* folder synchronizer, *including* subfolders. (x² also has a set of **folder synchronizer commands** that allows you to have a detailed look at the items before synchronizing.)
9. You can use robust transfer options to simulate a **backup** operation. When copying a folder to its “backup” location, if you check *Overwrite if newer, else skip* and *Clear archive attribute for source files* options together, only files that were modified or added will be copied and marked as backed up.
10. If you don't want to process any newly added files check the *Copy only files that already exist at destination* option.
11. You can load all your transfer jobs in a queue and turn to other things. x² automatically launches all transfer tasks one by one.
12. You can apply **filters** to the items being transferred (only files matching the specified complex criteria would be transferred)
13. When a file is copied, you may ask x² to reset the “Archive” **attribute** of the original to signify that the file is archived (backed up).

The command **F₅** (also launched from the **Edit | Copy to..** menu) copies the selection to its destination; and command **F₆** (also launched from the **Edit | Move to..** menu) moves the selection to its destination. Since both the commands are nearly identical, we will study only **F₅** to understand how to



use them both.

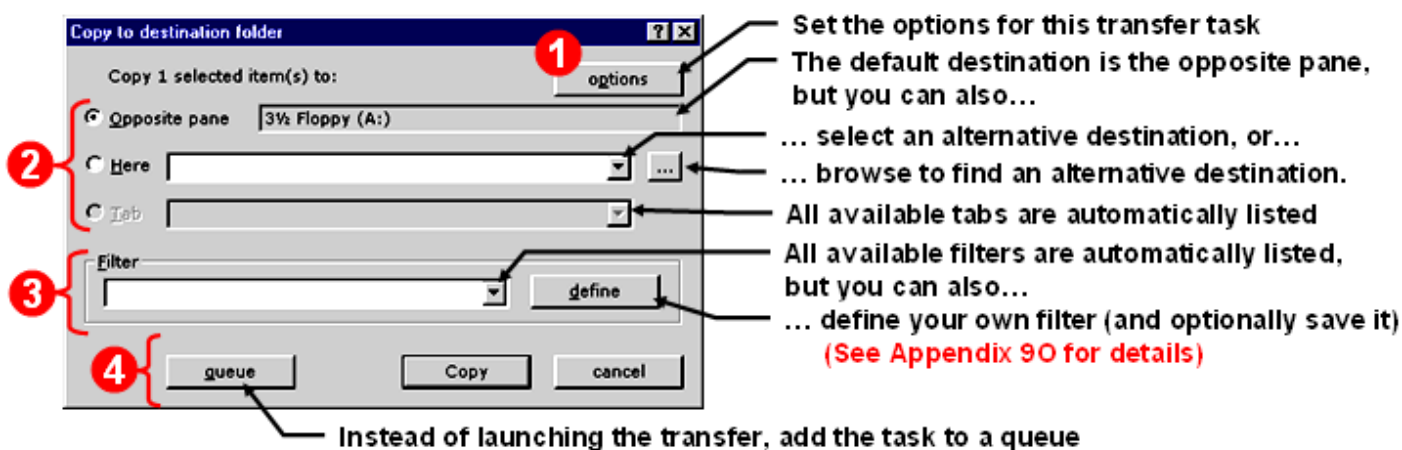
Warning: *If your destination has folders with the same name, the robust transfer command will merge the two folders without warning you about it. In some cases, the resultant merged folder may become unusable because integrity of the hyperlinks is damaged. It may be extremely difficult to separate the folders once they are merged. So, before using a robust transfer, check that your source and destination folders do not have subfolders with the same names.*

Starting a robust transfer task

When you press F₅, a dialog box pops up, as shown below.

The box has four main parts (shown with numbers in red). Use them as follows:

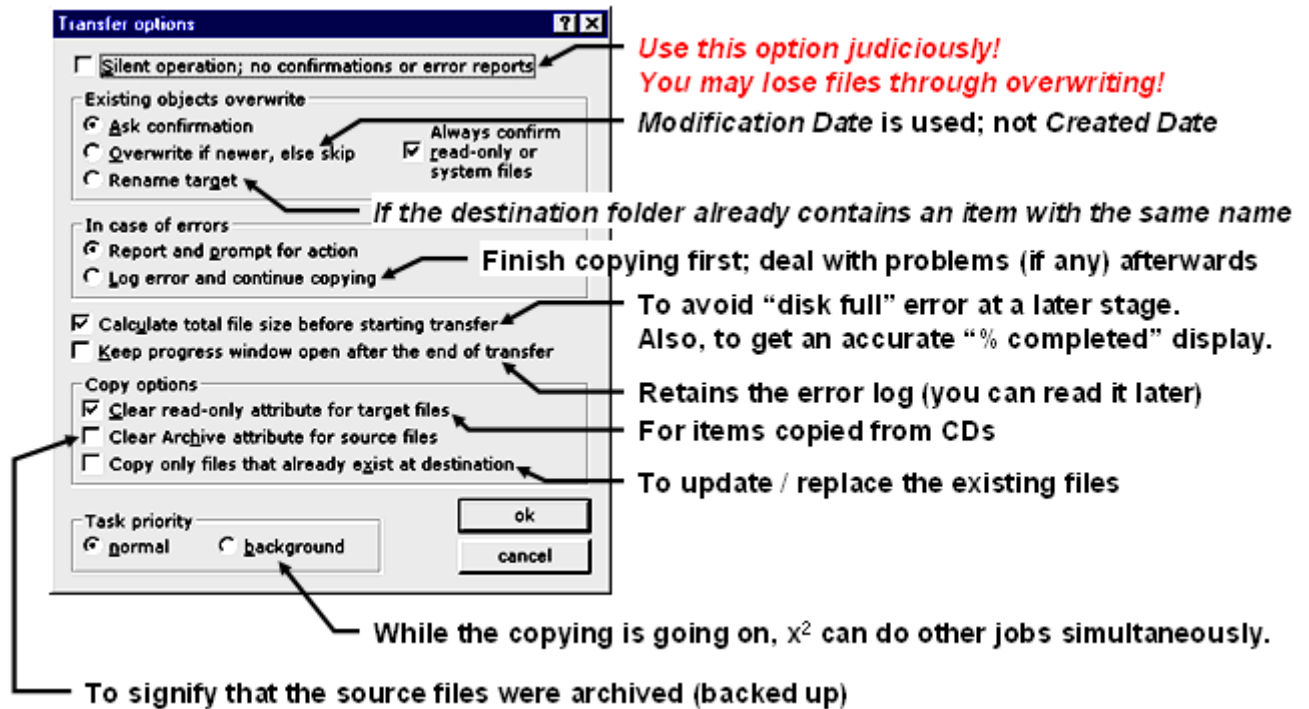
1. Using the **Options** button, set options for the transfer
2. Select the destination for your selection, by choosing one of the three radio buttons (*opposite pane / selected folder / selected tab*)
3. Optionally, select the **filter** to be applied to the items to be transferred. The pull-down menu shows all defined filters. It also has a **(Last used)** option, which allows you to reuse the filter that you loaded (=defined or used) last (*not only used last, as the name suggests!*).
4. Press either the **Copy** button (which launches the robust transfer task immediately) or the **Queue** button (which adds the task to a queue; x² automatically launches tasks from this queue, one at a time).



In the following sections, we will see these steps in more detail.

Setting options for the robust transfer task

When you click on the **options** button in the **robust transfer** dialog, it triggers another dialog box:



Warning: Some of these options allow you to suppress alarms when files are being overwritten with their namesakes. Use these options judiciously - you may end up losing important files!

After setting the options, press **OK** to save them.

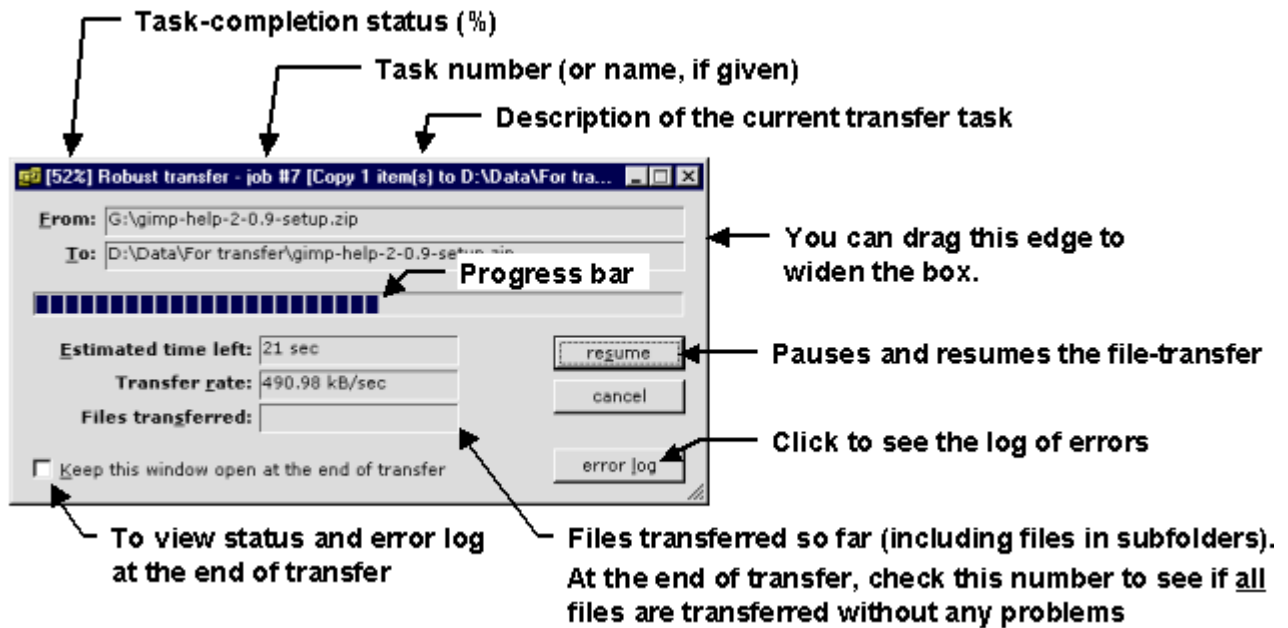
Once these options are set, they remain valid till they are set once again. These options are applied to all subsequent F₅ and F₆ operations. Some additional points to remember:

- If you select the *Silent operation* option, most other choices are blanked out: The only choice left to you is whether this transfer should run in the background.
- By default, x² does not know the size of load in advance. For each subfolder, it has to calculate the load size afresh. Therefore, even as the transfer is in progress, the progress bar (shown in the figure below) fluctuates when a new subfolder is taken up for transfer. If you want to avoid this, select the **Calculate total file size before starting transfer** option.

Launching the robust transfer task

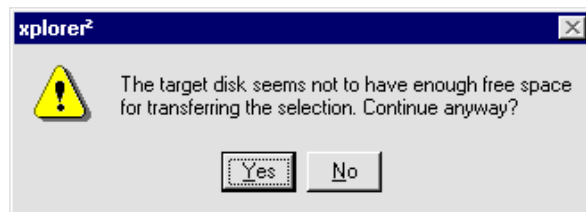
When you press the **Copy** button in the main robust transfer dialog box, x² launches the robust transfer task.

A **Robust transfer progress** dialog box opens:



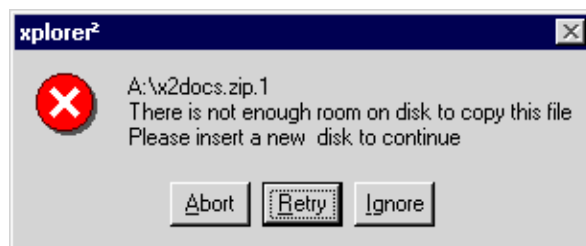
Tip: You can launch multiple tasks without waiting for the current task to finish. All such tasks run concurrently. However, the system slows down and the overall transfer time *increases*. Therefore, it is best to wait till the current task is finished or to use the **transfer queue**.

If you had selected the *Calculate the total size before starting transfer* option, x² compares the load size with the space available on destination disk. In case the disk space is not adequate, it pops up a warning:



Now it is up to you what to do next:

- Select *Yes*. When the first disk is full, x² will prompt you to change the disk and continue the transfer.



You may have to change multiple disks before the transfer is complete. (So keep enough disks at hand, so that you don't run out of disks midway!)



Tip: Notice that the **Retry** button is already highlighted. So after inserting a fresh disk, just press **Enter**. (You can press **Spacebar** in place of **Enter**, which is more convenient.)

- Select *No*. Make alternative arrangements (such as increasing free disk space by moving/deleting some items) and then attempt again.



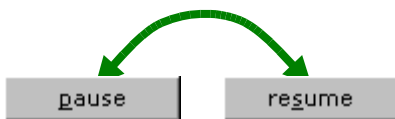
The **Robust Transfer progress** dialog box displays the live status of the file transfer. Its task button (displayed in the Task Bar, at the bottom of your monitor screen) also shows the percentage completion status. Hover the mouse pointer on this task button to see more details of the task (task number/name and destination folder.)

Tip: This feature is very useful for transferring large loads: If the transfer is going to take long, you can turn to some other task; and glance at the task bar once in a while to check the **% completed** status. This feature is also helpful if you have multiple robust transfer tasks running in parallel: The Task Bar shows the status of all transfer tasks at once.

- In Windows, the transfer speed gradually increases during a transfer. This is normal. Because of this, the actual transfer time is usually lesser than the initially estimated time. As the transfer progresses, the *Remaining Time* drops at a higher rate.
- If the selection-to-be-transferred has multiple folders, the speed and time indicators will get reset with each new folder.

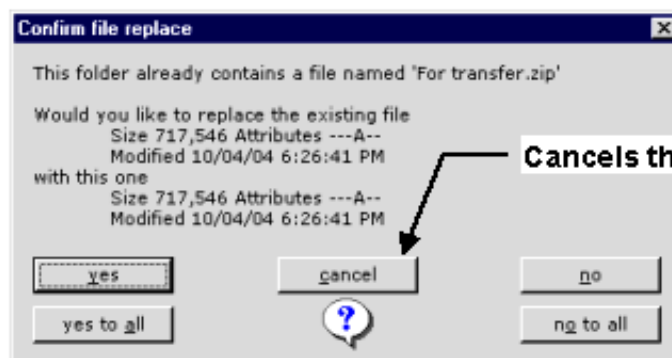


Caution: *In case of a floppy, even after the robust transfer is over, Windows continues to access the floppy for a few seconds. Therefore, do not remove the floppy from its drive till its LED turns off.*



You can pause the file transfer in case of emergencies. For example, if you have to create more space in the destination directory by moving/deleting some items, then pause the transfer, create some free space, and then press the same button again to resume the transfer. (When you click the **Pause** button, it automatically changes to **Resume** button.)

If the **Ask confirmation** (to overwrite objects) option is selected, x² will halt the file-transfer whenever an item has to be overwritten, and ask for your confirmation.

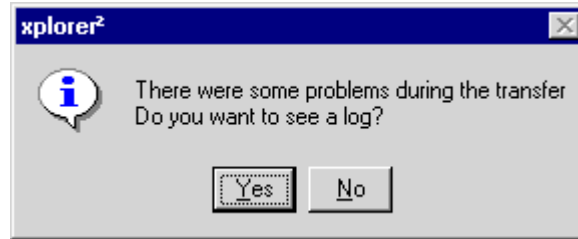


Cancels the rest of the file-transfer

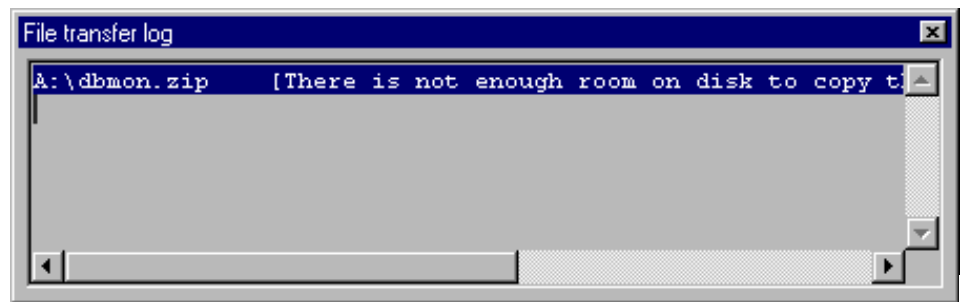
Notice the *Yes to all* and *No to all* options, which make it easy to give a common response to all possible overwrite cases.

Reporting the errors that occur during the robust transfer

Even when you have *unselected* the *Keep progress window open after the end of the transfer* option, if errors were encountered during the transfer, they are *not* suppressed: x² informs you that some errors occurred during the transfer, and prompts you whether you want to see the log of errors.



If you select *Yes*, then x² will show you the log, which you can use to trace the problematic files and take corrective actions.



Tip: The error log is displayed with its entire text highlighted. You can simply press **CTRL+C** to copy the entire report into the clipboard and paste it in a text file (or a worksheet), so that you can analyze the problem later. Also see how to **take a print** of this report.

Repeating the robust transfer with the same options

Once you **set the robust transfer options**, you will not need to change them frequently. For subsequent transfers, you can bypass the dialog box and copy the selection with a single shortcut: Just make a new selection and then either press **CTRL+F₅** to copy the selection to the opposite pane, or press **ALT+F₅** to copy the selection to the last destination used.

Note: The expression “*Last used destination*” requires closer inspection:

- By default, “*Last used destination*” means the folder you specified when you used the **Here** box the last time. Even if you subsequently transfer a few selections to the opposite pane, x² still remembers the location entered in the **Here** box as the “*Last used destination*”.
- If you want this command to remember the opposite pane’s path also, set the registry as shown **here**.

The command **F₆** (and its variations **CTRL+F₆** and **ALT+F₆**) act exactly the same way, except that they *move* the selection instead of *copying*.

Creating a queue of robust transfer jobs

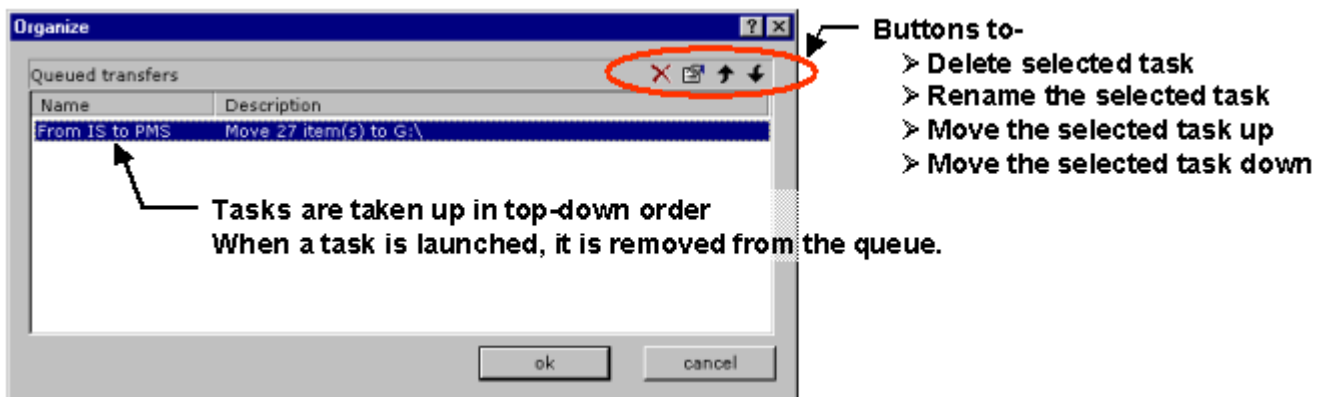
As mentioned before, concurrent transfers slow down the overall transfer speed. But you may not wish to wait patiently till the current transfer is over and then launch the next transfer task (especially when the tasks are large—you may have to wait for a long time). On the other hand, if you are not paying close attention, you will not know when the current transfer task is finished. That means you will lose time between two transfer tasks.

This is where the *transfer queue* is useful: Just **load all your transfer tasks in a queue**, and let x² take them up one by one.

This has multiple advantages:

- x² runs only one task at a time. As a result, the system does not slow down. Consequently, all tasks are finished in minimum possible time.
- No time is lost between two transfer tasks.
- While the transfers are taking place, they do not demand your attention: You can do something else (or even set the tasks to finish overnight).

The transfer tasks in the queue are taken up in top-down order. To change the order, select the menu option **Edit | Queue status**. A window pops up:



Now you can select any task and do any of the following:

- Use the arrow buttons to move the task up or down in the order.
- Delete the task from the queue.
- Provide a meaningful name to the task (e.g. “To free disk-space on F:\”)

Once a task is launched, it disappears from the queue. Now this task can be controlled using its own **Robust Transfer progress** dialog box. If you pause a running task midway, it will *not* return to the queue.

Note that the queue window does not have a provision to pause the queue: As soon as the currently running task is over, the next task gets launched automatically. The only way to pause the queue is to pause the currently running task.



Caution: *The present version of x² does not save the transfer queues. If your PC crashes for some reason, the queue will be lost. This can be a problem if you have not kept a track of exactly what was to be transferred (especially if some of the transfers are sourced from scrap panes). As a precaution, do not create huge queues.*

Using the *copy-and-paste* or *cut-and-paste* methods

The traditional *copy-and-paste* or *cut-and-paste* methods are really relics of the past: they were designed for the single-paned file-managers because you could not access the source and the destination folders at the same time. Although x² offers these commands, keep in mind that you don't really need these laborious methods, because with the **tabbed dual-pane interface** of x², you have direct access to virtually unlimited folders. The other methods described above are much faster.

The *copy-and-paste* method is used to *copy* the selection to the destination folder; where as the *cut-and-paste* method is used to *move* the selection to the destination folder.

Both methods are nearly identical, except the first step, as explained below:

1. Make your selection, and then press **CTRL+C** (or select the **Edit | Copy** menu option) to copy all selected items into clipboard.
 - To *move* the selection, use the **CTRL+X** shortcut (or the select the **Edit | Cut** menu option). This operation cuts the selection from the source folder *and* places it in the clipboard.
2. Navigate to the destination folder in *any* folder pane and then press **CTRL+V** (or select the **Edit | Paste** menu option). This will paste the selection into the destination folder.
 - Instead of pasting the clipboard contents in an *existing* folder, you can **create a new folder**, open this new folder and then paste the clipboard contents.

Instead of pasting the items copied into the clipboard, you can paste links pointing to them in the destination folder. To do this, navigate to the destination folder r-click in the pane. From the context menu that appears, select **Paste link** option.

Using the bundle-unbundle method

All the methods described above suffer from a common problem: the comments and other ADS (Alternate Data Streams) content attached to items are lost if the items are transferred to a non-NTFS medium.

Unfortunately, media with non-NTFS format are very commonly used; such as hard disks with FAT 16/32 formatting, CDs, floppies, USB-based devices, etc. If you use any of these devices to transfer the items, the comments will be stripped off.

Note: MS Office files (such as doc, xls, ppt, etc) are not affected by this problem, because the ADS data is embedded *inside* these files.

To overcome this problem, x² bundles the ADS contents with the items in a bundle. The bundle can be safely recorded in a non-NTFS medium. Simply unpack the bundle into the destination NTFS-formatted drive.

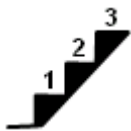


Warning: *The non-NTFS media can be used only for carrying the bundle: At the point of use, you must unbundle the contents into a NTFS-formatted disk; otherwise the ADS content will be lost.*

During both bundling and unbundling operations, the ADS part is handled completely automatically, without your intervention (or even knowledge).

Note that the *bundle-unbundle* operation can only copy the items: the original items are left untouched. If you want to *move* the items instead, after creating the bundle, delete the original items manually.

How to use this command:



1. Select the items and select the menu option **Actions | Bundle to go....** A window pops up. Enter any desired name for the bundle and press **OK**.
2. x² prepares the bundle and places it in the folder. The original items are not touched.
3. Now move the bundle to the destination medium which must be NTFS type (you may use a non-NTFS type medium to transfer the bundle, though).
4. At the destination, select the bundle and use the menu option **Actions | Unpack bundle**. The original file structure is reproduced in the destination folder.

Handling file transfers that get aborted repeatedly

With using Windows Explorer, you may have come across some folders that just *cannot* be copied (or moved), because Windows always reports an error and aborts the file transfer. You do not know how much was actually transferred in your last attempt; and so you have to transfer the entire directory all over again. But all your attempts are invariably aborted.

If you have faced such a situation, you would know how frustrating that is! And partly that is because Windows Explorer cannot handle such directories.

However, using the **Robust file transfer** function of x² PRO, you can isolate the problematic files (that were aborting the transfer) and transfer the good ones safely. Later, you can examine the error report to trace each problematic file and decide whether to repair it or replace it with a good one.

Since x² **Lite** does not have the **Robust file transfer** function, you will need another method, described in **Appendix 9N**. This is really a trick, rather than a straightforward command of x². (But then such situations are so rare that a developing a command specifically to handle such file-transfers may be overkill!)

Renaming files or folders

In x², you have the following options for renaming items:

1. Rename items individually (the extension is left untouched)
2. Change the extension of the file
3. Rename items in bulk

The following sections describe each method.

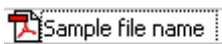
Individual renaming

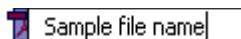
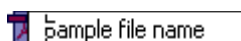
To rename a file/folder individually, select it and press **F₂** (you can also select the **File | Rename..** menu). x² switches to *edit* mode, and opens the file's name in an edit field.

In this edit field, a “|” cursor blinks at the end, indicating where your new string will appear. Note that the entire name of the item is highlighted by default.

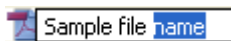
You have the following choices:

- To rename the file totally, just type the new name. You don't have to delete the older name first: the highlighted text is automatically replaced by the new text.
- To attach a suffix string to the name, press the **RightArrow** key (or the **END** key). The highlight around the name is removed, but the blinking cursor remains at the end of the name. Start typing the suffix string.
- To attach a string to the *beginning* of the existing name, press the **Home** key. The highlight around the name is removed, and the blinking cursor jumps to the beginning of the existing name. Start typing the prefix string.
- To move the blinking cursor to any other part of the name, use any combination of these shortcuts: **RightArrow**, **LeftArrow**, **CTRL+RightArrow**, **CTRL+LeftArrow**, **Home** and **End**. You can delete some letters at this place using **Del** and **BKSP** and type a new string.
- To delete a part of the name, you will need to highlight it first, and then delete this highlighted part, with **Del** or **BKSP**. Or simply type a new string to replace the highlighted portion of the name.




x² provides several mechanisms for easy highlighting: Place the cursor at the desired place in the name, and then use the following shortcuts to extend the highlight till a specific part of the name:



Shortcut	How it extends the highlight
SHFT+LeftArrow	Letter-by-letter, towards the beginning of the name
CTRL+SHFT+LeftArrow	Word-by-word, towards the beginning of the name
SHFT+Home	Till the beginning of the name
SHFT+RightArrow	Letter-by-letter, towards the end of the name
CTRL+SHFT+RightArrow	Word-by-word, towards the end of the name
SHFT+End	Till the end of the name

The renaming is not over till you press **Enter**. This is your last chance to abort the renaming (x² cannot undo a renamed file):

- To accept the changed name, press **Enter**.
- To cancel the renaming, press **ESC**. (If you switch to another application before pressing **Enter**, x² will cancel the renaming.)



Caution: *Sometimes, another application pops up a dialog window, and steals the focus. This effectively terminates the renaming. When this happens, switch back to x² and check whether the item was renamed properly.*

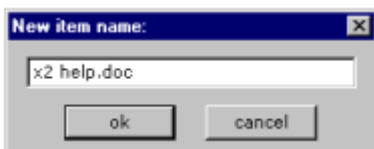
Changing extension of a file

Highlight the file and press **CTRL+F₂**. A dialog box pops up. Change the extension (you can edit the base name, too) and press **OK**.

Note that not all type changes make sense, e.g. you can't change a *txt* file to *exe* and expect it to be transformed into an executable! Still changing extensions can be useful for various text file types.

Here are some typical applications:

1. If you have a separate folder for installing utilities, you may want to change the installation path. However, many WinZip self-extracting executables do not allow you to select the installation path. To overcome this problem, simply change the file extension from "exe" to "zip". After this, if you d-click on it, the file will open rather than execute. Then you can extract the files and place them where you want.



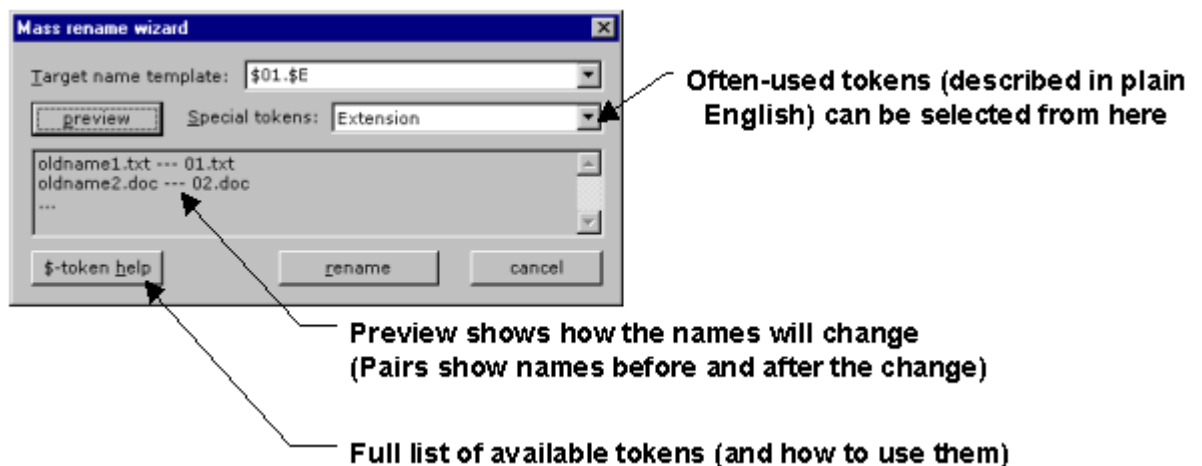
2. If you have a PowerPoint presentation (pps) file, you can edit it after changing its extension to “ppt”.
3. Some files downloaded from the Internet do not open (with Acrobat Reader or other relevant application). Sometimes this is because the file is corrupt, but often this is because the file was given a wrong extension (and therefore a wrong application is trying to open it). In this latter case, it is possible to recover the file by just changing its extension to the correct type. Whenever you get such errors, check out the file with **QuickViewer** or a text editor (select the file and press F₃). The type of the file is usually identified near the top of the file (in a portion called *file header*). Although there will be junk (unreadable) characters in this part, you may be able to determine what type of file it is. (To avoid a sharing violation, first make sure that the editor is closed and only then change the extension.)
4. If you are not able to find the file’s true type from its header, then you can run TrID on it (see **chapter 8**). Then change its extension accordingly.

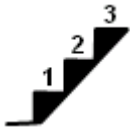
Mass renaming

To rename multiple items simultaneously, select multiple items and follow these steps:

1. Press F₂ or use **File | Mass Rename..** command. The Mass Rename wizard pops up (see the figure below).

Note that the shortcut F₂ is common for renaming individual items and also for renaming a selection. If you have selected more than one items, x² automatically switches to *mass renaming* mode.





2. Using special “tokens”, compose a template for the new names in the **Target Name Template** combo.
 - The **Special tokens** pull down menu provides you with some special tokens. Whatever option you select here gets added to the string already composed in the **Target Name Template** combo.
 - If you need help about tokens, press the **\$-Token help** button.
 - At any time you can press **Cancel** button to abort the command.
3. Press the **Preview** button to see a preview of the changes in the names using the current template.
 - If you are not satisfied, change the template and repeat step 2.
4. When you are satisfied, press the **Rename** button.

Refer to **Appendix 9B** for a full list of tokens and their typical uses.

Associating file types

You can use the Windows interface to control the file associations. Browse the **Control Panel** (the easiest way is to click on the **Control Panel** node in the Tree), select **Folder Options** and click on the **File types** tab. Follow the Windows instructions from this point.

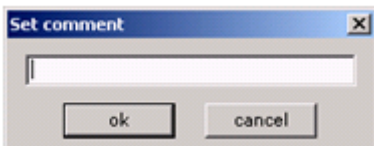
Attaching comments to selected items

Comments are small pieces of text associated with files and folders, which are 100% controlled by the user and completely ignored by the file system.

There are many possible uses for comments:

- Extended information for the contents of a document
- Keywords for document classification
- Any other arbitrary information as cross-references etc
- Most important of all, x² allows you to use comments as search rules, so you can easily check and retrieve files that have a set of keywords.

NOTE: File comments rely on an advanced NTFS feature called “*Alternate Data Streams*” (ADS). Imagine a file as a kind of “folder” that has a **stream** for the regular contents and secondary streams for other information, including comments. When you move the file around, all these alternate streams are silently carried along.



You can attach comments to files and folders. After selecting the desired items, press **ALT+Z** (or use menu **Actions | Set comments...**). A window pops up.

If the items already have a comments attached, these appear in the box. You can clear them if you want, or add your own comments. Press **OK** when you are done.

The main use of comments is for searching for a particular keyword. Refer to **find files and folders (CTRL+F)** and **Select items that match a set of rules (ALT+G)** commands for details.

Commenting is an extremely useful tool: you can attach an unlimited amount of additional information to files and folders without having to change their

contents or names. For example, you can enter *multiple* keywords (such as author's name, subject, category, etc) in comments. Note that a common keyword can be attached to multiple files and folders; where as you can't provide the same name to multiple files!

Comments are indispensable with graphics, audio and video files (jpg, AVI, mp3, mpg, etc), because you can't add your additional remarks in the main body of the file.

For example, suppose that you have a collection of cartoons and you want to use a suitable cartoon in your presentation. What would you do?

- One option is to view all your cartoons and read their lines to find a cartoon that conveys what you want. What a waste of time!
- Another option is to rename each cartoon after its punch line. But in many cases, it is advisable to retain the original file names (for example, if you regularly download them from a website, you should know which file you have downloaded already. If you change the names of downloaded files, you will lose that reference!).
- A far better option is to attach keywords to each file, using the **comments** field. The keywords should convey the subject and the punch line (You could do this as soon as you download/acquire each cartoon, or when you have free time). Later, while preparing your presentation, you'll know exactly which cartoon will provide the desired punch line! At the same time, you have the original filename if you need it.
- Apart from *viewing* the comments, the comment field can be split in a spreadsheet (e.g. Excel) and analyzed as explained in **chapter 6**. To use this trick effectively, you should set some time aside to think about what information you are going to embed in the **comments** field. You can concatenate different (even unrelated) properties in the single **comments** field, and later split these into separate columns using Excel.

Unfortunately, comments are not supported universally:

	Supported on-	Not supported on-
Windows	NT4 ^{note-1} , 2000, XP	95, 98 ^{note-2}
Disk Format	NTFS	FAT, FAT 32

Notes:

1. In NT4, only x² can support comments; where as Windows Explorer cannot
2. Compound files (e.g. all Microsoft Office documents) support comments even for Windows 95 and 98.

Caution: *when you transfer your collection to a non-NTFS disk (such as disks with FAT/ FAT 32 format; or to a CD or a floppy), the comments will be lost.*



To avoid such loss of comments, first compress them using a backup program or an archiver like **WinRAR** that optionally preserves ADS.

Setting attributes of selected items

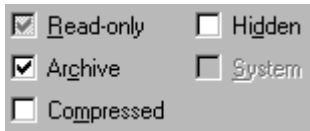
All files and folders have some properties called “attributes”, which are used in file management. Using x², we can check and change these attributes.

What are the attributes

The Windows Operating System handles files and folders according to their attributes, as shown below:

Attribute	How the item is treated if attribute is set (ticked)
Read-Only	Most programs cannot write or modify the file
Hidden	The item is normally hidden unless “show hidden files” is checked (in program options)
Archive	Indication that the file has been modified since the last system backup. (As soon as a file is changed, Windows sets this attribute. A backup utility archives this file, and then resets the attribute.)
System	Reserved for special system files – <i>do not change unless you are certain of its effects</i>
Compressed	The file/folder can be stored in compressed form to save disk space, while offering instant access to its contents (NTFS only). This is <i>not</i> the same as storing the items in compressed archives such as zip, rar, tar, gz, etc.
Encrypted	The file is stored encrypted so that only the owner can read its contents (NTFS only)
Offline	When working in NN , remotely stored files are only physically available when connected to the remote disk. When you work offline, such file is not physically available. However, you can use synchronization tools to create local copies of these files. Such locally cached files are marked <i>offline</i> . They are not original files, and yet it is still possible to work with them. You can set the synchronization tools to periodically connect to remote disk and synchronize the files.
Junction point (Windows 2000 or later only)	(Also known as <i>Reparse Point</i>). It allows a folder to be grafted into another folder on the same <i>local</i> computer. Junction points are transparent to programs. They are used to mount volumes, transfer installed software to disks (while leaving a link behind), etc. <i>Warning: Do not try to delete these items: you will disturb the target folder's structure!</i>





How to check attributes of an item

To see the attributes of an item, select it and press **F12**. A “Properties” window pops up. If this window has more than one tabs, open the **General** tab. At the bottom, you will see all the attributes.

How to change attributes

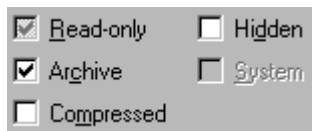
In the “Properties” window, click on any checkbox to toggle its status between “cleared” and “ticked”. Click **OK**.

- A grayed checkbox with a tick shows that the selection has “mixed” status for that attribute. A click in the checkbox will clear it. In other words, that attribute is cleared for all the items in the selection. Subsequent clicks will toggle the status between “cleared” and “ticked”.

How to check attributes of a group of items

If all the selected items belong to a *single* folder, then press **F₁₂** to see the attributes of the selection.

- For any given attribute, if all selected items have the same status (i.e., either “ticked” or “clear”), then its box will show this status clearly.
- However, if the selected items have mixed status (some are “ticked” and others are “clear”), then the checkbox has a *light* gray shade and a gray-colored tick in it.
- If the volume cannot have “System” files, then the “System” checkbox will have a *dark* gray shade.



For example, the screenshot on the left shows attributes of multiple items. You can conclude the following about the selected items:

1. None of the selected items are “hidden” or “compressed”
2. All items in the selection were modified at least once (the “archive” is set).
3. Only some (but not all) of the selected items are “read-only”.
4. The volume cannot handle “system” files.

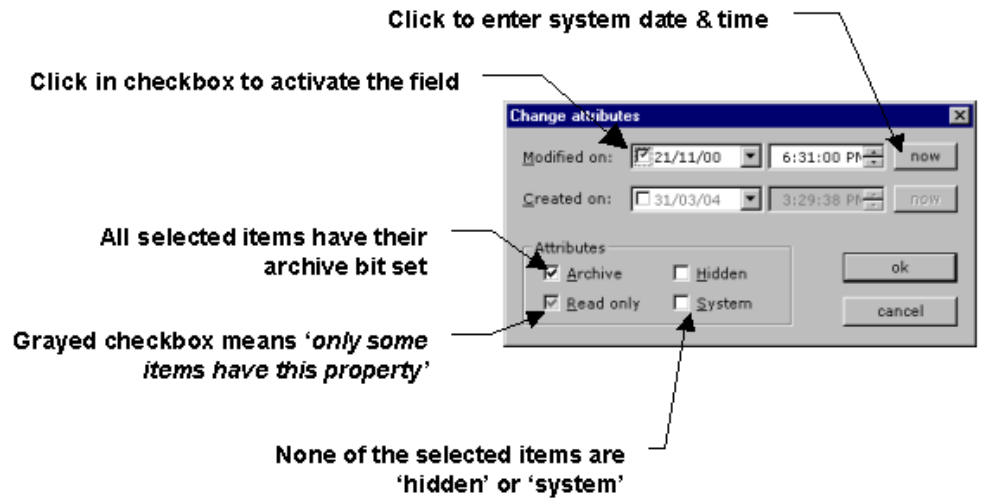
But this method is not always convenient: if the selected items belong to n different parent folders, x² pops up n “properties” windows (one for each parent folder).



Warning: *If you press F₁₂ for a large selection, x² could pop up so many “properties” windows that it might crash the PC! Once these windows start popping up, they cannot be stopped with ESC: you will have to use the Task Manager to kill x².*

But this is not x²’s fault: Even Windows Explorer does the same thing! That’s why we have another lifesaver function in x²: **SHIFT+F₁₂** (see below).

For changing the attributes (and dates) of such large selections, x² has a powerful command: after selecting items, press **SHIFT+F12**. A window pops up (see the figure below):



- To change any attributes, click in the relevant checkboxes. The status toggles between “cleared” and “ticked”
 - A grayed checkbox with a tick shows that the selection has “mixed” status for that attribute. A click in the checkbox will clear it. In other words, that attribute is cleared for all the items in the selection. Subsequent clicks will toggle the status between “cleared” and “ticked”.



Tip: The dialog box does not offer the rarely used attributes: **Compressed** and **Encrypted**. To change these attributes, use the regular item properties command (F12) and click on the **Advanced** button.

Operations specific to some file types

Apart from all functions described above, some file-types have their own special operations. These additional functions are available through their context menu. To access this menu, select the file and r-click. Select from the menu that pops up.

For example, archive files (zip, gz, tar, rar, etc) will show extracting options (for that you need to have an archiver application like WinZip or ZipGenius installed on your PC)

If you **SHIFT+r-click**, you get an *extended* version of the context menu, which gives you even more options for some file types.

Some examples:

1. Executable files will include a **Run As** command that allows you to run a program impersonating a different user
2. Other files have **Open with...** menu option, to let you use a non-default application to open the file. For example, instead of playing a MIDI file with its default player, edit it with an editor.

Comparing directories with mirror browsing

Sometimes, you have two nearly identical directories; and you want to browse both to compare them visually.

To compare any two directories visually, load them in the folder panes and then press **CTRL+M** (or use menu **Go to | Mirror browsing**). x² goes in *Mirror browsing* mode, in which both folder panes follow each other as you go to different branches of the directories. As you go up and down in the directory tree, go on comparing the files listed in both folder panes.

When you activate the *mirror-browsing* mode, x² automatically activates *mirror-scrolling* mode described in the following section.

Remember that this is a manual method, and therefore not very reliable. A reliable method of comparing near-identical items is to **flatten** both directories in the opposite panes of a scrap container and then compare them with synchronization commands (**F9** or **CTRL+F9**).

Finding matching entries in two folders

Sometimes, you have two folders having similar contents. As you focus on each item in one folder, you want to see the matching file in the other folder. To do this, activate the *Mirror Scrolling* mode (use menu option **Go to | mirror scrolling**). As you move the focus in the active pane, x² automatically moves the focus to the matching item in the inactive pane. It scrolls the inactive pane as required.

- If x² can't find a matching item in the inactive pane, the focus in the inactive pane stays on the last focused item. It will move again only when x² finds another match.

Synchronizing folders (Comparing folders)

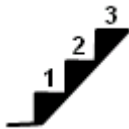
Synchronization is a special operation in file management: Just as you synchronize your watch, you can synchronize your files and folders. You can compare files in two folders based on different criteria; such as dates, contents or names. Once you identify the differing files, you can optionally replace them.

Synchronization based on modification dates

When you have multiple copies of a file, you are likely to modify one copy and let the other copies untouched. This makes the other copies of the file “out-of-sync”.

Usually this will happen to multiple files in a given folder. So, it is better to check the entire folder for correct synchronization.

To synchronize folders, follow these steps:



1. Load the folders in opposite folder panes
2. Press **F₉** (use menu option **Mark | Synchronize panes**). x² ignores all subfolders, and selects files in *both* panes according to the following rules:
 - If a file is present in only one pane, it is selected
 - If the same file exists in both panes, then the copy with later modification date is selected.
3. All items that match the specified criteria are highlighted in both panes.
 - Items that can't be decided are highlighted with little question marks on their icons. (We will call this “*undetermined*” status.) You may like to check these items further.



Now it is up to you what to do next. For example, you can select each pane and copy all selected files to the opposite pane. Or investigate the *undetermined* items.

Synchronization on other criteria

You can compare two folders based on criteria *other than* the modification dates. x² offers two different commands for this comparison:

Command	Effect
Mark Synch wizard (CTRL+F ₉)	Compares only the files in the folders. Subfolders are ignored. <ul style="list-style-type: none"> ➤ Optionally, the subfolders <i>are</i> compared, but only by their names (their contents are ignored).
Tools compare subfolders	The contents of both folders are compared <i>recursively</i> . (Both folders are flattened first and then compared.)

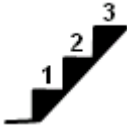


Tip: You may wonder why these commands are placed in different menus. Well, there is a reason: the first command *selects* (marks) all those items that match the defined criteria (in both panes); and therefore it is placed in the **Mark** menu. On the other hand, the second command is a dedicated *tool* for comparing two folders; and hence it is placed in the **Tools** menu.

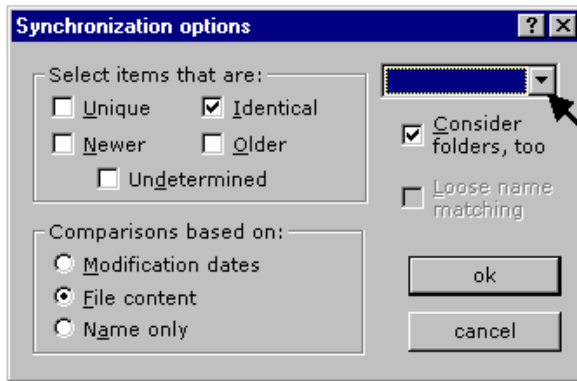
Let us see both commands in more detail:

Using the *sync wizard* method

Follow these steps:



1. Load the folders in opposite folder panes
2. Press **CTRL+F**, (use menu option **Mark | Synch wizard**). The synchronization wizard pops up.



Ready list of typical scenarios

Start with the pull-down menu that shows two commonly used scenarios (*Different* and *Identical*). When you select any of these scenarios, x² selects the rest of the parameters accordingly.

After this, you can modify the selection, as shown below:



Group	Guideline
Select items that are-	<p>This group offers choices based on three distinct criteria:</p> <ul style="list-style-type: none"> • Unique vs identical • Newer vs older • Undetermined (this allows you to select all items having “<i>undetermined</i>” status, given by an earlier synchronization command) <p>Yet, you can select only <i>one</i> item in this group; not one choice from each group.</p> <p>Caution: <i>If you select more than one choices from this group, you will get strange results.</i></p>



Comparison based on-	<p>You can select only <i>one</i> item in this group:</p> <ul style="list-style-type: none"> • Modification dates- You will get the same results as the F₉ command; but here, the results are changed according to your choice in the “Select items that are-” group. • File content- useful when dates are unreliable. Only files with matching names are further compared by their contents. A much slower method; but 100% accurate. When differences are found in this mode, there's no way to tell which file is "newer" so xplorer² arbitrarily considers the version in the active pane as newer and the one in the inactive as older. If in doubt, open the files and inspect their content. • Name only- will find groups of files having same names, even if the contents are different
Consider folders, too	<p>Folders in opposite panes are checked for identical names.</p> <p>Caution: <i>This command does <u>not</u> compare folders based on their contents! So, even when two folders have totally different contents, x² will still mark them as identical if their names are identical. If you delete one of this pair, then you could lose data.</i></p> <p>To avoid this problem, first flatten the folders in opposite panes of a scrap container and then compare them (see the following section).</p> <p>This choice is not available in F₉ command, which ignores all subfolders.</p>

3. Press **OK**. All items that match the specified criteria are highlighted in both panes.



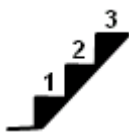
- Items that can't be decided are highlighted with little question marks on their icons.

Now it is up to you what to do next. For example:

- Select each pane and copy all selected files to the opposite pane.
- If you were looking for items marked with the “undecided” status, you may want to copy them somewhere and investigate them further.

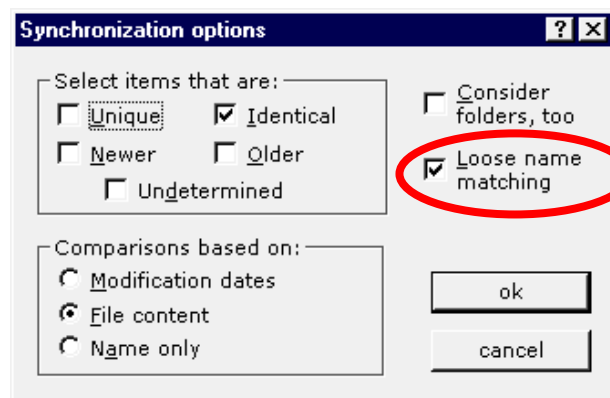
Using the *compare subfolders* method

Follow these steps:



1. Load the folders in opposite folder panes
2. Select the **Tools | compare subfolders** command.

Immediately, x² launches a new *scrap container* and *flattens* the folders in opposite scrap panes. The following dialog box pops up:



Note that this dialog box is very much similar to the one described in the *sync wizard* method (hence the same guidelines apply). In fact, it has only one additional option: *Loose name matching*. When you select this option, x² matches the items by name, and ignores their relative position in the folder hierarchy. After locating each pair of matching items, x² applies the other selected criteria to check them further. For example, with the settings shown above, x² will check if both files are *identical*, by comparing their *contents*. *This command should be used where each scrap pane does not contain multiple items with identical names.*



Caution: *Use this option very carefully:*

1. *If there are multiple items having same names, x² may compare the item with a wrong item on the other pane. That is because x² takes up the items in top-down order in both panes for comparison. The actual order depends upon what sorting is applied to the pane. (The scrap panes automatically inherit the sorting order from the last active scrap container. You have no control on this.) If the panes are not sorted on the same attribute (or the same ascending/descending order), then the wrong items will be picked up and compared.*
 2. *You cannot use sync-o-paste (described in the following section) on the results of such a comparison, because the matching items may not belong to mirror positions in the folder hierarchy.*
3. Select the options you desire in the box and press **OK**. x² will highlight the items matching the selected criteria.
 - Items that can't be decided are highlighted with little question marks on their icons.



Now it is up to you what to do next. For example:

- Select each pane and copy all selected files to a folder (remember you are working in a scrap pane. So you will have to drag-n-drop the selection to the main x² screen.)
- Provided that you have *not* selected the *Loose name matching* option, **sync-o-paste** the selection to the other folder.
- If you were looking for items marked with the “undecided” status, you may want to copy them somewhere and investigate them further.

Synchronizing collections

The synchronization commands described above work for a single folder at a time. They are ideal if you want to compare two simple folders that don't have subfolders.

But if the two folders-to-be-compared have subfolders, you have to open each of the subfolders in opposite folder panes and run the synchronization command once again. Then you will get the results. Before moving on to the next pair of subfolders, you must decide what to do with your current results.

Obviously, this is not convenient at all.

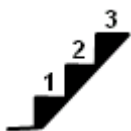
Here's where the scrap container comes to our rescue: you simply **flatten** both folders in the opposite panes of a scrap container, and then run the **F₉** (or **CTRL+F₉**) command. This will compare two complete folder hierarchies in one stroke.

For example, you have two similarly structured directories:

c:\mydocs	d:\temp\mydocs
c:\mydocs\res	d:\temp\mydocs\res
c:\mydocs\res\research	d:\temp\mydocs\res\research

(Notice that the folders below the "root" have identical names)

Then here's what you have to do:



1. Open a scrap container and force it to *dual pane* display mode by pressing **CTRL+O**
2. *Right-drag* **c:\mydocs** and drop it in the left scrap pane; pick the **flatten path** menu command
3. Repeat steps 1 and 2 for **d:\temp\mydocs** in the right scrap pane
4. Check synchronization as explained above (**F₉** or **CTRL+F₉**).

The sync-o-paste function

Once the differing items are highlighted, select **Edit | Sync-O-Paste** menu item. Each of the highlighted items ends up in its respective folder (e.g. items from **d:\temp\mydocs\res** end up in **c:\mydocs\res** and vice versa).

Sync-o-paste directly acts on the selected items: it doesn't require a prior **CTRL+C** (menu option **Edit | Copy**) command.

Scrap containers may host items from arbitrary locations. The deep synchronization logic tries to match *folders* first, and then applies the usual content comparison procedure for each folder pair. This deep-sync feature works well when the two hierarchies have identical structures. But sometimes it is not possible to match all folders left & right, when the hierarchies are completely different. In such cases there will be a lot of items left in an **undetermined** state, and a little red question mark will appear overlaid on their icon.

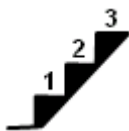


Synchronizing only the modification dates

Sometimes, you are sure that two files are identical, yet you see a difference in their dates. This typically happens due to changes in daylight savings time (DST) or when you have extracted the copies from zip archives, etc.

x² has a command called *synch-touch* to synchronize only the dates of such matching items.

The command works as follows:



1. Open the folders in opposite panes of x² and use the **Action | Sync touch...** menu option.
2. x² compares the two folders and finds pairs of files with matching names.
 - Non-matching files in both panes are ignored.
 - All subfolders are ignored.
3. For each pair of matching files, x² takes the *modified* date of the file in the active pane as reference, and adjusts the *modified* date of the matching file in the inactive pane to this date.

At the end, items with the same name have the same *modified* date.

This isn't exactly a synchronization command (it does not affect the files themselves) but it works in a similar fashion.

Also, compare this command with the **change attributes of a group of items (SHIFT+F12)** command, which gives a *single* date to all the selected items.

Deleting empty folders

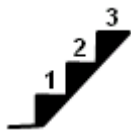
First, let us see practical examples when you have to delete empty folders:

- Some installers create temporary folders, which you have to delete subsequently.

- When you uninstall some applications, they may leave behind a lot of empty folders, which you have to delete manually.
- When you are collecting new files on subjects of your interest, it is a good practice to use a directory template (which is an empty folder structure that covers all subjects of your interest: it has a separate folder for each subject, and all these folders are organized taxonomically. Refer to [chapter 8](#) for further details). When the collection grows large enough, you may transfer it on a CD. But before cutting the CD, you have to delete those folders that don't have any files collected in them.

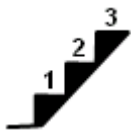
(If these empty folders are not deleted, they will clutter your CD and make browsing difficult.)

Here is the method to find and remove such empty folders:



1. Use the **CTRL+F** command.
 - a. In the **Look in..** field, specify the top-level folder
 - b. Make sure that the **Folders** checkbox is selected; and the **Files** checkbox is *unselected* (cleared)
 - c. In the **Additional rules** section, enter a rule to check for Contents=0. (Select the **Contents** column, and enter 0 in both **Min** and **Max** fields)
2. Press **OK**.
3. The search command will list all empty subfolders in a scrap pane.

The **Lite** version does not have the powerful search function. So, users of **Lite** version will have to use the following alternative method:



1. Switch the folder pane to **Details** style
2. Using **ALT+K** command, add the *Contents* column to the display.
3. Load the top-level folder in the active pane.
4. **Sort** on *Contents* column. Empty subfolders, if any, will get sorted to top/bottom. Decide what to do with them.
5. Repeat step-4 for all subfolders (one by one).



Warning: Before deleting each empty folder, check if it is reserved for applications such as WinZip, download accelerators, etc. While the folder may appear to be empty at present, the concerned application may be using it from time to time. If you delete such a folder, the concerned application may not work, or may malfunction.

Cleaning up directories

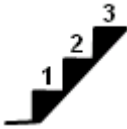
Over the time, we accumulate a lot of files and folders. Periodically, we try to make sense out of this mess. This “spring-cleaning” activity involves opening the folders systematically and checking out whether the contents are useful. Useless material is deleted and useful material is retained.

The problem is that in a complex directory, we cannot be sure whether we

have covered all nooks and corners.

Scrap panes are ideal for this application. Follow these steps:

Flatten the top-level folder into a scrap pane.



1. **Sort** the contents on *path*. This will group the contents by their folder hierarchy. (Items belonging to a particular branch are grouped together)
2. Now select the items one by one and view them in the **QuickViewer**. If you want to have a more detailed look, press **Enter** to open each file with its default application (Microsoft Word, Excel, PowerPoint, GIMP, WinZip, etc). Now close the file in the other application and switch back to the scrap pane.
 - If the item is useless, press **CTRL+Del**. The item will be deleted from the disk.
3. Select the next item in the scrap pane list, and repeat step-3.
 - Sometimes, after seeing a few items, you may realize that the entire folder is useless (there is no need to check the remaining items in that folder). In that case, select all items with that path and press **CTRL+Del**. All items in that folder will be deleted at one stroke.
4. When you reach the end of the list in the scrap pane, you will have checked all the items in the directory, without missing anything.
5. At this stage, there is just one more thing to take care of: you may have deleted all items in some subfolders, leaving them totally empty. You may not want to have them any more. Get rid of them using the **procedure described** in the preceding section.

Copying only the useful part of a directory

First, let us see the practical examples:

- You want to copy only certain part of a directory on a **NN** PC (or a server). Since the original belongs to someone else, you can't delete the unwanted part.
- You have a CD with partly outdated contents. You want to copy the useful part, add new updated contents and cut a new CD.
- You have many CDs. You want to cut a single CD by culling the useful parts from those CDs.

These cases have a common theme: you cannot delete any part of the original directory.

Now let us see how to *do* it:

Repeat the procedure described in the preceding section, except that you have to press **Del** instead of **CTRL+Del**. (In other words, you are removing the “useless” items only from the scrap pane; *not* deleting them from the disk.)

Warning: *If you press CTRL+Del, you may end up deleting the original items (if you have the necessary access rights).*

Once you have only the useful items in your scrap pane, you are ready to copy them to a new location. You have two choices here, as shown below:



To do this-	...follow these steps:
Copy the items in a flat structure. (All files will go into a single folder)	Select all files from the scrap pane (press CTRL+A) and then drag-n-drop them into the destination folder. <u>Warning:</u> <i>If you have duplicate names in the list, those files will be overwritten.</i>

Copy the original directory “as it is”; but before copying, delete the empty subfolders.

Select all files from the scrap pane (press **CTRL+A**).

Switch over to x² main screen. Navigate to your destination folder (the folder where you want to place the copied directory).

R-click inside the folder pane, and from the context menu, select the **Paste special | Structured scrap clips** option. All items are pasted in their respective subfolders. The command actually mirrors the original directory structure for each selected file.

Refer to **Appendix 9P** to see how this command works.

Notes:

Only the selected items will be pasted here. If you do not select some items, they will not be pasted.

This command mirrors the original directory structure only for the copied items. In other words, if you have not selected any item from a subfolder, it will not be mirrored in the destination. Consequently, many of the subfolders of the original directory are not created in the destination directory simply because no items are selected from those subfolders.

Because of this, you do not need to manually delete the empty subfolders.

Duplicates! Duplicates!

You may have many duplicate files on your disk, which you may want to remove. On the other hand, you may want to *create* duplicate files for specific reasons. This section describes both these situations.

Creating duplicates in the same folder

Sometimes, you need duplicates of a selection in the *same* folder. There are two major uses of such duplicates:

1. *To use a file as a template.* Typical examples are-
 - The original file is a blank form for student registration: To register each student, you have to create a copy of the file, fill all details of the student in it and save it under the student's name or roll number.
 - The original file is a blank template for creating work-instructions: It has all the required sections, blank tables, etc. To write instructions for a new process, you have to create a copy of the file, fill the blank spaces in the file and then save it under the new process' name.
2. *To create a backup file:* While carrying out operations on a file, it is a good idea to create a backup first; so that if something goes wrong, you can discard the changed file and revert to the backed up file.

Typical examples:

- When you edit a drawing (or a digital photo), you are not sure if you will like the results.
- You are asked to draft changes in a large document, and you are not sure whether your boss would approve the changes.
- You may carry out a risky operation on a file, which can corrupt the file (e.g. you are using a beta version of an application that crashes often).

You can create duplicates with two alternative methods:

- **CTRL+Drag-n-drop** your selection in the same folder.
- Use the **Edit | Duplicate** menu option

By default, these duplicates are named **copy of <original name>**. You will have to rename them as required.

Detecting duplicates (and optionally removing them)

Many times, you end up having several copies of the same file in different folders (probably you downloaded the same file several times, and stored it in a different place each time). In such cases, you may want to free disk space by retaining one copy and deleting the rest.

Using x², you can locate duplicate files spread over your PC (In some cases, the duplicate files have different names. Even in such cases, x² can detect them by comparing their contents).

Sometimes, the situation is quite the reverse: you may have several files with the same name (say, because they are on the same subject). Despite having the same name, most of them may not be actually duplicates. So, your strategy might be to eliminate the duplicates *and* rename the non-duplicates (say, by attaching a suffix, etc). x² can detect such files also.

Scrap panes have a special function called **DupChecker**, which checks for duplicate (identical) files; even the files that have identical contents but

different names.

You can check duplicates in *any* collection, not necessarily from the same folder. For example, in a single scrap pane, you can collect folders and files from CD, your local hard disks and even from other PCs on your LAN (Network Neighborhood). This is very useful, because your collection may have identical files spread over multiple folders.

DupChecker identifies sets of duplicate files. In each set, it treats the file listed at the top as “the original” and all the other files as “duplicates”.



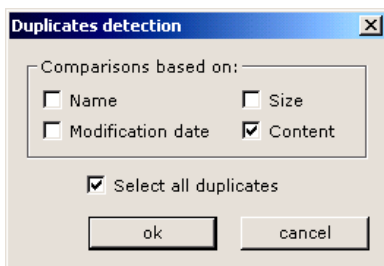
Tip: You can exploit this feature by **sorting** the collection before using the **DupChecker**. For example, if you sort by *modified date*, the item having the earliest *modified date* will be identified as original within a set of duplicates.

DupChecker can remove all such duplicate(s) and retain only the original (as we will see shortly).

To use **DupChecker**, just load a single scrap pane with all the items you want, and select **Tools | Check Duplicates** menu option.

Note that although the **scrap container** is a *dual*-pane structure, the DupChecker works only in a single pane. So, you must add all your items in a *single* scrape pane.

The **DupChecker** dialog box pops up. Select your options.



- The option **Content** is useful to find duplicates having dissimilar filenames but same content. But this a very time-consuming process, because it compares the contents of each file in the selection with all other files.
- If **Select all duplicates** checkbox is selected, **DupChecker** will highlight all duplicates in each set. At this stage, you can select **Delete** to delete all duplicates in one stroke, and retain only the original in each set.

After making your selection, press **OK**. **DupChecker** will identify sets of identical files, and hide all other files in the collection.

- If there are more than one sets, **Dupchecker** marks alternate sets with a gray background to set them apart (the display appears banded, like printer paper).

Only the **content** parameter gives you a foolproof list of duplicates. Searching by any other parameter(s) is much faster, but such listings provide only a *preliminary* evidence of duplicate files: you may need further proof before actually deleting the redundant copies. A good guide is the **checksum** column that you can activate with **ALT+K** (or use the **View | Select columns** menu option). It shows a numeric “summary” of a file's contents.

- If checksums of two files are different, the files are *definitely* different. But if the checksums are equal, they imply a strong possibility that the files are identical, but this is not guaranteed.

Once you are sure that the highlighted entries are indeed duplicates, you may proceed to delete them.



Warning: *If you delete an entire set, you will lose the “original” also!*

If your only aim was to find and remove duplicates, your task is over: you

may close the scrap pane without saving it.

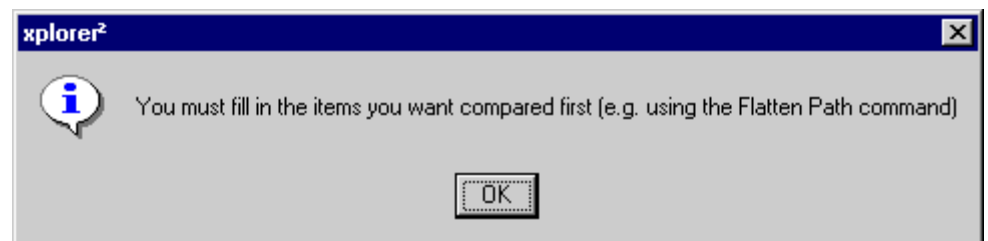
On the other hand, once you have got rid of the duplicates, you may want to see the remaining entries in the scrap pane and do some more processing. If so, use the menu option **Tools | Reveal unique**.

Note that if you want to save the collection after deleting the duplicates, you must reveal the unique items first; otherwise the scrap pane will save only those entries which are visible at the moment (i.e., only a few surviving entries from the sets of duplicates). Hidden items are not saved because scrap container has “what-you-see-is-what-you-can-save” policy.



Warning: *If you save the scrap pane without revealing the unique entries, all the unique entries are lost from the scrap pane collection forever!*

The DupChecker can be launched from x²'s **main screen** also: Use the **Tools | Check duplicates** menu option. A new scrap container is launched, and x² shows you this Tip:



Note: This command only provides an easy access to an empty scrap pane. You must first fill up a scrap pane with the items and then launch the **DupChecker** as described earlier in this section.

Re-organizing your files

Re-organization of files is necessary in the following cases:

1. If you have a large, complex collection of folders and files, you may want to reorganize it periodically, by moving files/folders to more logical locations.
2. You may want to copy selected files from someone else's collection (e.g. from a **NN** PC, CD, or a company server). At this time, you will copy these files in a directory that has a different structure compared to the source directory.

The common theme here is that for a given selection, you have a few alternative destination folders. (on the other hand, if you want to copy your selection to multiple folders, the method is provided on page 167)

You need an easy method to quickly make different selections and then drop them into the correct destination folders.

x² offers two different methods to reorganize your collection:

1. Using tabs
2. Using a scrap pane

Let us see these methods in detail:

Re-organize your collection using tabs

Before starting the actual re-organization, open the source and destination folders in different tabs.

1. Open multiple tabs (using **CTRL+Ins**) in the active folder pane.
2. In each tab, load a source (or destination) folder.
 - In case you are planning to re-organize the same folders again, it is a good idea to **save the folder group**; so that you can simply re-load the entire group when you are re-organizing the next time.

Now you are ready for the re-organization exercise.

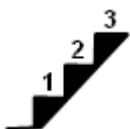
Open a tab where a source folder is loaded. Select the items to be shifted out and move them to the desired folder, using one of the following methods:

- **Drag-n-drop method** (drop the selection on the tab area).
- **Robust file transfer commands**. (Before using this method, you must load the target folder in the opposite pane).

Re-organize your collection using scrap panes

This method exploits the fact that a folder listed in a scrap pane acts as a drop target. The core idea is to make a list of all your “destination” folders in a scrap pane, and then move the items using **drag-n-drop method**.

1. Launch a scrap pane (from **windows** menu)
2. If it is double-paned, make it single-pane (by pressing **CTRL+O**)
3. Resize its window to a convenient size (as shown on the left).
4. Keep this window “*Always on top*” by using PowerPro or PowerMenu



(Refer to **chapter 8** for details of PowerMenu)

5. Search for all "destination" folders. Drag-n-drop these folders into this scrap pane.

- Don't worry- the actual folders remain where they are. Here, you will just get a shortcut.

6. Once you have created all shortcuts in the scrap pane, resize it once again to show all folders.



- **Tip:** You may want to reduce the pane width: Just the initial words in a folder name are usually enough for you to guess its full name. To minimize the window size, turn off the toolbars (select **View | Toolbar** menu item).

7. If you are going to use these same destination folders time and again, it is a good idea to save the scrap pane. Press **CTRL+S** (or from **Actions** menu, select the **Write contents** option.) Specify a filename that you'll remember easily (generally, what the entire group of folders represents).



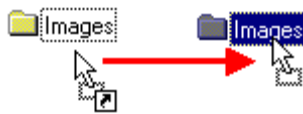
- **Tip:** Rather than making a single CIDA file, it is better to make several CIDA files; each having a separate group of destination folders. For example, make one CIDA file for your professional subjects, and another CIDA file for your hobbies. This reduces clutter and makes file-transfer much easier.

8. Use both panes of x² to browse your source folders, and start dragging items to the scrap pane (i.e., to the destination folder of your choice)

- Note that these transfers take place on real-time basis; not when you *save* the scrap pane. (In other words, these transfers take place instantly: it does not matter if you save or don't save the scrap pane again. This is not like a Word or Excel document, where you can revert to the previous state by *not* saving the changes.)

- To copy the selection, press **CTRL** while dragging

- To move the selection, press **SHIFT** while dragging



- While dragging, when your mouse pointer comes over the "background" area of the scrap pane, it turns to "shortcut". Don't worry about it-- it simply means that the scrap pane is willing to accept your selection as a shortcut *if* you want to drop the selection there. (Since you don't intend to do that, move on!) When your pointer reaches the destination folder, it will change to "copy" or "move", depending upon your drag-modifier (i.e., **CTRL** or **SHIFT**).

- Instead of browsing the source directory during the re-organization, you may use a scrap container: First fill it with items from the source directory using various methods; such as filling it with the results of one or more searches, **flattening** various directories in it, and dropping handpicked items in it.

Comparing dissimilar directories

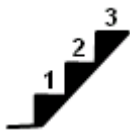
Consider this scenario: After copying articles from various sources (NN PCs,

CD, or a company server), you may have reorganized those items in different directories. You may have even renamed some of the items (to suit your own naming scheme, or because you already had an item with the same name). And now you suspect that there are more goodies at the original source. But you do not want to download the items that you already have (let us say the source directory is huge, you have downloaded most of it and now you don't have that much free disk space). How do you quickly spot *only* the new items and get them?

The **synchronization of collections** command will not work in this case, because it works only if the directories under comparison have identical structure.

Here is the trick in brief: **flatten** the “source” and the “destination” directories in a single scrap pane, and look for duplicates. If you have already copied any item, it will show up as duplicate of the original. Now remove all sets of duplicates and reveal unique items. All items having remote paths are the ones that you don't have on your PC!

Let us see this process step-by-step (actually it takes care of some tricky issues we did not mention in the shorter version—As they say, god is in the details!):



1. Open a scrap container and set it to dual pane mode. Set the pane **styles** to *details*.
2. Select your own (“destination”) directories one by one, and **flatten** them in a single scrap pane.
3. Select the “source” directories (on CD or a remote PC/server) and **flatten** them in the *same* scrap pane.
4. **Sort** on **path** column.
5. Run the **DupChecker**. That will display only the duplicate sets and hide the rest. But this does not necessarily mean that you have these items on your PC: some of these duplicates could be in the source directory itself! So, check that within each set of duplicates, at least one item has a local address (in other words, you already have a copy on your PC).
6. Select all such sets (including the “original” and all its “duplicates”) and remove them from the scrap pane by pressing the **Del** key (or using the **File | Remove** menu option).



Warning: *If you press CTRL+Del (or use the File | Delete menu option), you will end up deleting the items from the disk (if you have the necessary access rights).*

At this stage, the duplicate sets remaining in the scrap panes do not have a local item (meaning you do not have that item). You will want these items, but then you will want to avoid copying the duplicates from the source directory! So first you will have to remove the duplicates from the source directory.

You can't do it in the *current* scrap pane, because it still has the non-duplicate items hiding behind the scenes (which can be revealed by using the **Tools | Reveal unique** menu option). So we will have to

use the opposite pane to remove “duplicates” from these sets and then bring back the “originals” to the current pane.

7. **Select all** (CTRL+A) and move these items into the opposite scrap pane.
8. Although the items are moved, the original scrap pane will *not* look blank at this stage: you have to manually remove them by returning to the first pane and pressing **Del**. (They will be only removed from the scrap pane; but will *not* be deleted from the disk.)
9. That leaves only “originals” that you don't have.
10. In the opposite page, **sort** first on names and then use the **Dupchecker** with *Select duplicates* option. Delete the duplicates.
11. Switch back to the original scrap pane, which is now blank. Use the **Tools | Reveal unique** menu option. Remember that these items are from both source and destination directories; whereas we need only items from the source directories. To delete all local items, **sort** on path column and delete all items with local paths.
12. Finally select all items from the other scrap pane and move them back to the original scrap pane.
13. At this stage, the scrap pane contains a list of items that you *definitely* do not have. But you may not want them all: to remove items from the list, select them manually and press **Del**.



Warning: *If you press CTRL+Del (or use the File | Delete menu option), you will end up deleting the items from the disk (if you have the necessary access rights).*

14. The scrap pane now contains the list of all items that you want. The pane itself serves as your source: open your target (“destination”) directories and start copying from it.
 - Isolated files can be simply dragged and dropped,
 - In some cases, it is required to copy a whole folder, keeping its structure intact (for example, it might have HTML files having internal links which will be disrupted if you disturb the structure of the folder). In such cases, select the entire group of items and copy them to clipboard; then switch over to the destination directory and r-click. From the context menu that appears, select **Paste Special | Structured scrap clips** option.

Splitting and merging files

x² has a pair of commands that can split a file and later merge these split parts.

Such splitting-and-merging has some ready uses:

- You want to transfer a large file in floppies, because writing in a CD is not possible.
- Your email account does not allow you to attach a file larger than a

certain size.

- Your email server rejects files having size beyond a certain limit

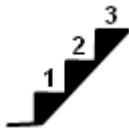
In these cases, you can split the file, transfer the split parts using floppies or emails, and join the parts at the other end.

Note that while creating split parts, x² does *not* affect the original file in any way. Just imagine that x² creates a copy of the original file first, and *then* chops it up!

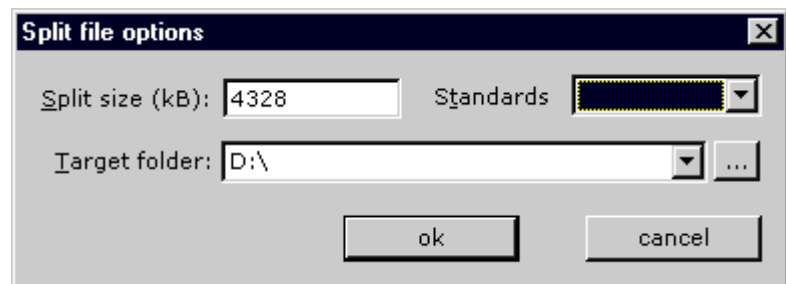
While you will need x² to split a file, you do *not* need x² to join the split parts. This is useful if you are planning to send split parts to someone who does not have x².


Let us see how to split a file and merge these split parts:

Splitting a file

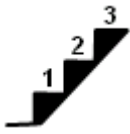


1. Select the file and use **Actions | Split file...** menu option. The following window pops up:

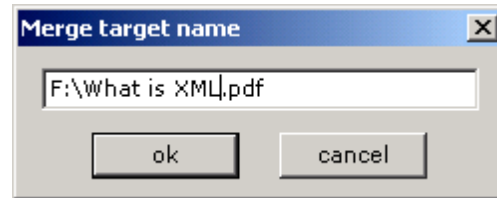



2. In the **Split Size (kB)** input box, enter the desired size for the split parts.
 - The **Standards** combo box offers standard splitting sizes of 1.44 MB (for floppies) and 650 and 700 MB (for CDs). If you select any standard split size here, it will override the “Split Size” input box.
3. By default, the split parts are put in the same folder. Select a different target folder if you want, using the browse  button.
4. Press **OK**.
 - x² will split the file and put the split parts in the destination folder.
 - As discussed before, the original file remains intact.

Joining the split parts using x²



1. Select all the split parts.
 - This command joins the parts in the order shown in the pane. Therefore, ensure that the parts are **sorted** in the correct order. (Sort by name or modified date; in *ascending* order.)
2. Use **Actions | Merge files...** menu option. A small window pops up.



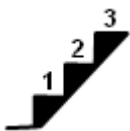
Tip: By default, x² gives the original name to the joined file and puts in the same folder where the split parts are. But you can change the resultant filename and/or enter a new destination path (The box does not have a separate *browse*  button to let you specify the destination folder).

3. Press **OK**. x² creates the joined file at the specified location.
 - The split parts are unaffected. If you want, you can delete them now.

Joining the split parts without using x²

When you send the split parts to someone else (say, through separate emails), how will the recipient join these split parts if he does not have x²?

Worry not: he can join the parts *without* using x², using the following simple process:



1. Open your DOS command line window

Depending upon your Windows flavor, this is available at different places. Try the following locations:

Start | MSDOS command Prompt

Start | Programs | Accessories | Command Prompt



Tip: or simply type a \$ in the Address Bar and press **ENTER**.

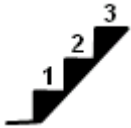
2. Using the DOS commands, navigate to the directory where the splits parts are kept.
3. Enter the following command and press **ENTER**:

copy /b part₁+part₂+...+part_n NewFileName

For example, assume that you have split a file called **house.doc** in four parts and sent it to your friend. (The four split parts will be named **house.doc.1**, **house.doc.2**, and **house.doc.3**)

Now assume that your friend does not have 2x or x² to join the parts to retrieve the original file. He also wants to change the filename to **home.doc**.

You should advise him to follow this procedure (just copy the following steps and send them along with the floppies/email!):



1. Open the DOS commandline window.
2. Navigate to the folder where the split parts are kept, and enter the following command:

Copy /b house.doc.1+house.doc.2+house.doc.3 home.doc

3. Press **Enter**.

A new file will get generated, named **home.doc**.

Note that the split parts would still remain in his directory. Your friend will have to delete them after he retrieves the whole file.

This method works very well for small files; but if there are many split parts, the command becomes too big. Entering such a huge command becomes laborious. Also, if there is a typographical error anywhere, the command will fail. Therefore, it is better to use x² or 2x to join large files!

Size Management

In size management, we monitor the free disk space and sizes of directories and selections. Many of our disk-maintenance decisions depend upon these factors.

Let us see some typical applications:

- Usually, before moving or copying a large folder, we look at its size and then check whether the destination drive has adequate free space to accommodate it. This requires checking the size of a selection and also checking the free space on the disk.
- All programs (including Windows) need certain minimum amount of free disk space to run properly (generally specified in “*Required system resources*” section). So, in case a program starts malfunctioning, we check whether there is enough disk space available for it. If not, we must make some space available.
- To keep our file system efficient and free of junk, we have to check our directories periodically to check if their contents are still useful.
 - Some articles are outdated because the technology has changed
 - Some articles are valid for a limited period (e.g. standards, quotes, etc). You need to replace them with the latest version.
 - We do not need some articles any longer, because we have better quality articles now.

Deleting (or at least, cleaning up) such directories releases precious disk space. Often, we begin by looking at the larger directories first because they are likely to contain the highest amount of junk. Deleting them can release the biggest disk space. Then we check progressively smaller directories.

- It is a good habit to keep a backup of all critical directories. But sometimes we have some “not-so-important” stuff, which we don’t backup so regularly. But it may be important enough to justify an occasional backup. So we look at such directories periodically to check if

they are backed up. Again, we may like to focus on larger directories first because a larger content is at risk if not backed up.

- When you transfer your collection to CDs, you normally take up the folders in a particular order (e.g. By name, date, size, etc). But these methods are not able to fill up each CD to the full. You have to try various combinations that would fill each CD to the maximum. In this way, you would need minimum number of CDs to hold your collection.

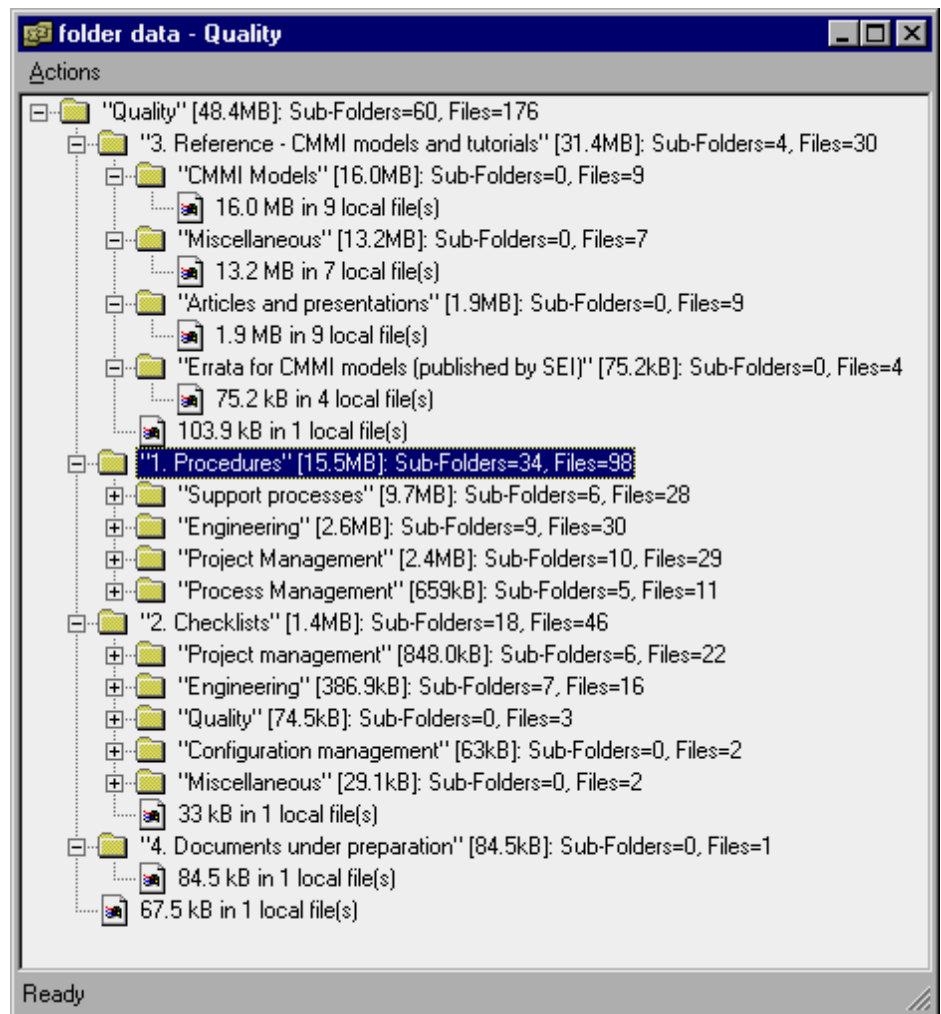
x² has multiple mechanisms to help you in these operations:

Folder statistics

This powerful command shows you the size of all subfolders of the selected folder, and also the count of all files in these subfolders.

Think of this command as extended form of **CTRL+D** command, which shows you size of all subfolders of the active folder.

To view the statistics of any given folder, press **ALT+D** while you are browsing that folder in the folder pane (in other words, the folder path must be displayed in the folder pane's header). A window pops up, showing a tree of the selected folder (see the example below).



You can navigate in this tree as in the **Tree Pane** of x², except that you cannot explode a node by pressing **ALT+RightArrow**.

The following statistics are shown against each subfolder:

Details	Example (see the figure above)
Name of subfolder	Quality
Size occupied by the folder	48.8 MB
Number of subfolders (All subfolders located in the branch are counted recursively)	60
Files (All files located in the branch are counted recursively)	176

In addition, the local files are counted and their total size is reported (e.g. “16.0 MB in 9 local files”).

The window has the following menu options:



Menu option	What it does...
Browse (or press ENTER)	Loads the selected subfolder in the active folder pane.
Sort by name	Sorts subfolders at each level of the tree by name, in ascending order only.
Sort by size	Sorts subfolders at each level of the tree by size. Largest subfolders are listed at the top.
Copy text (press CTRL+C)	<p>Copies the data for the selected branch into the clipboard. (In our example, only the subfolder named “1. Procedures” would be copied to clipboard)</p> <p>There are at least four important uses of this facility:</p> <ol style="list-style-type: none"> 1. Paste the data in a text/doc/html file (and optionally print it) 2. Paste the data in a PIM (Personal Information Manager) and add more information there. 3. Paste the data in a spreadsheet (such as Excel) and analyze it. For example, you can try out different combination of subfolders to fill a given CD. 4. Take a print (either directly or after data-analysis) and use it as a checklist.
Close	Closes the window

Please bear in mind that **ALT+D** presents a frozen snapshot of the directory. Once the directory tree is displayed, the command is over: it does not continue refreshing the folder sizes. In fact, the following activities may be changing the size of some of subfolders *at that very moment!*

- Downloading
- Unzipping
- Deletion/addition of items by a remote user who has the required access (this may happen without your knowledge, or sometimes you may have kept a shared folder for this purpose)

You can check this out by repeating the **ALT+D** command after a few seconds. Another window will pop up with the latest snapshot of the directory. Compare the two displays: If such activities *are* taking place, then some of the folder sizes will have changed. To get a correct picture, it is better to wait till these activities are over.

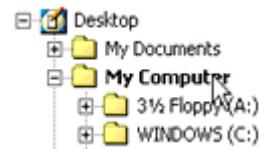
Free disk space

1. The free disk space for the folder displayed in the active pane is displayed in the status bar (see item 19 in [screenshot](#)).
 - The display also shows the free disk space *in percentage*. This is useful, especially in case of a disk that is split in multiple smaller partitions (compared to a disk of a well-known size like 40 GB or 80 GB, the partitions end up having odd sizes like 6 GB): Look out for disks with low percentage, and create space on them!



Tip: If you load a shared folder from a **NN** PC in the folder pane, the Status Bar shows free space available on that *remote hard disk*.

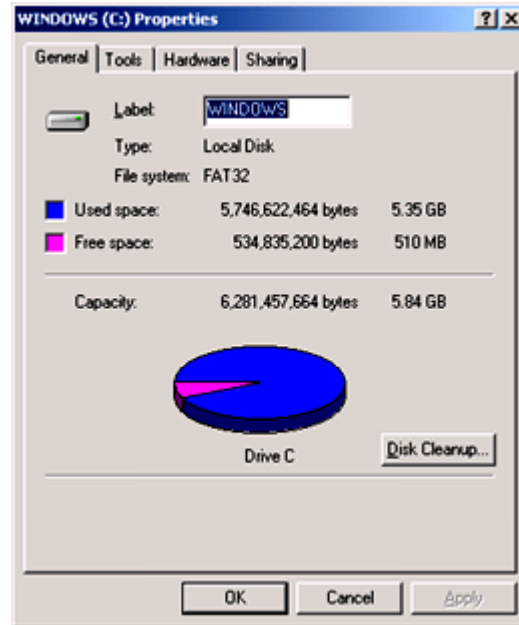
2. To check free disk space for all disks of your PC, click on **My Computer** node in the tree.



The active pane shows all disks on the PC, *including* all **mapped drives**. The total size and free space are shown against each drive. (Note: these figures are shown only if the pane is in **details style**)

Name	Type	Total Size	Free Space	Comment
3½ Floppy (A:)	3½-Inch Floppy Disk			
WINDOWS (C:)	Local Disk	5.84 GB	510 MB	
Utilities (D:)	Local Disk	5.84 GB	2.13 GB	
DATA DISK-1 (E:)	Local Disk	11.7 GB	3.22 GB	
DATA DISK-2 (F:)	Local Disk	13.8 GB	306 MB	
Compact Disc (G:)	Compact Disc			
Compact Disc (H:)	Compact Disc			
Control Panel	System Folder			Customizes the appearance ...

3. Select the disk and press **F12**. The **Properties** window pops up as shown below. The used space, free space and total storage capacity of the disk are displayed. The *file system* of the disk (FAT/ FAT32/ NTFS) is also displayed.



4. Press **ALT+CTRL+SpaceBar**. The message bar of x² displays free space on disks being browsed in folder panes. The display is smart: if both folder panes are displaying directories from the same disk, it recognizes this and shows the free disk data only once, as shown below:

Different disks in both folder panes	⚠ Free space: C:\ [509.558MB]; D:\ [2.134GB]
Same disk in both folder panes	⚠ Free space: E:\ [3.229GB]

Selection size

The first three tricks described below work both in the folder panes and the scrap panes.

1. When you have not yet made your selection, look at the status bar, near the right hand corner. The panel shows the total number of items in the active folder pane. This figure includes the subfolders listed in the folder pane.

Now make your selection and then look at the panel again: Now it shows the total number of items selected and their total size, as shown below (this screenshot is from x²'s main screen. The status bar of a scrap container is similar, except that it does not show free disk space):

Normal view (without selection)	58 item(s) 1.6 GB free (25%)
After selection	14: 22.5 MB 1.6 GB free (25%)

The display **14: 22.5 MB** means *the selection contains 14 items, and their collective size is 22.5 MB*.

The item-count *always* includes the count of folders in the selection.

However, the *total size* figure (in this example, 5.3 MB) does *not* include the sizes of folders in the selection.

Note that the Normal View (without selection) is shown in its default format: To change it, use the **Tools | Options...** menu option. In the window that pops up, select the Advanced tab. Put a tick in the **Show total folder size** checkbox. Now the Status Bar will display the number of items and also the total size of files when less than two files are selected. The subfolders are ignored.



For example, a display **58 Item(s) 254.1 MB** means there are 58 items (*including* folders) in the current folder. The collective size of all files is 254.1 MB (in which subfolder sizes are not counted).

2. To see the sizes of all folders displayed in the active pane, press **CTRL+D** (menu option: **Tools | Subfolder size**). The active folder pane shows sizes of subfolders, instead of showing **<folder>** against them, as shown below:

Before	<table border="1"> <thead> <tr> <th>Name</th><th>Size</th></tr> </thead> <tbody> <tr> <td>SubFolder 1</td><td><folder></td></tr> <tr> <td>SubFolder 2</td><td><folder></td></tr> <tr> <td>Bugzilla guide</td><td>769,157</td></tr> </tbody> </table>	Name	Size	SubFolder 1	<folder>	SubFolder 2	<folder>	Bugzilla guide	769,157
Name	Size								
SubFolder 1	<folder>								
SubFolder 2	<folder>								
Bugzilla guide	769,157								
After	<table border="1"> <thead> <tr> <th>Name</th><th>Size</th></tr> </thead> <tbody> <tr> <td>SubFolder 1</td><td>475,214</td></tr> <tr> <td>SubFolder 2</td><td>5,718,629</td></tr> <tr> <td>Bugzilla guide</td><td>769,157</td></tr> </tbody> </table>	Name	Size	SubFolder 1	475,214	SubFolder 2	5,718,629	Bugzilla guide	769,157
Name	Size								
SubFolder 1	475,214								
SubFolder 2	5,718,629								
Bugzilla guide	769,157								

Notes:

- The **size** column is available only when the folder pane is in *details* style.
- Please bear in mind that **CTRL+D** presents a frozen snapshot of the folder sizes. Once the folder sizes are displayed, the command is over: it does not continue refreshing the folder sizes. In fact, the following activities may be changing the size of some of folders *at that very moment!*
 - Downloading
 - Unzipping
 - Deletion/addition of items by a remote user who has the required access (this may happen without your knowledge, or sometimes you may have kept a shared folder for this purpose)

You can check this out by repeating the **CTRL+D** command after a few seconds. If such activities *are* taking place, then some of the folder sizes will change. To get a correct picture, it is better to wait till they are over.

- The **CTRL+D** command always counts the size of *Hidden* items, although they may not be visible to you at the moment. In our example, the size of **SubFolder 2** is 5,718,629 bytes. Even if you open this folder and hide some items in it, x² will still continue to show the same folder size of **SubFolder 2**.
- When **CTRL+D** is in effect, if you select any folders, their count and cumulative size are included in the summary displayed in the status bar.
- The **CTRL+D** command has an interesting side effect: when it is in effect, if you **sort** the active folder pane on size, all subfolders are sorted as if they are files.
- There are two limitations of **CTRL+D** command:
 - If your selection involves folders, you have to press **CTRL+D** first and *only then* make your selection. If you have already made your selection before pressing **CTRL+D**, the summary in the status bar will *not* include folders: You will have to select those items again to see the effect of **CTRL+D**.



Tip: In case your selection is complex, you will face difficulty in selecting *exactly the same* items again. To ensure that the other items do not come in your way, use the **CTRL+ALT+J** command *before* using the **CTRL+D** command. That will hide all items that are *not* in your selection. After finishing your work, select the **View| Show all** menu option to reveal the hidden items.

- If the folder pane is **sorted** on size and if **CTRL+D** is used, the items will *not* sort again to accommodate the folders. The only option is to click the corresponding column header *twice* (to bring back the same sorting order).

In both the cases above, you *cannot* use **CTRL+R** to refresh the display, as it will actually reset the **CTRL+D** command!



Caution: Use this command in the correct sequence; otherwise you will get wrong results!

Another thing to keep in mind is that the **CTRL+D** command has to calculate the size of all subfolders of all the folders displayed in the folder pane. This can be rather slow if the folders are large, with deep hierarchy. During this calculation period, x² does not show a “busy” status (either in status bar or by turning the mouse pointer into an hourglass). The only indication of completion of this command is when the size column shows actual size of all folders in the active folder pane,

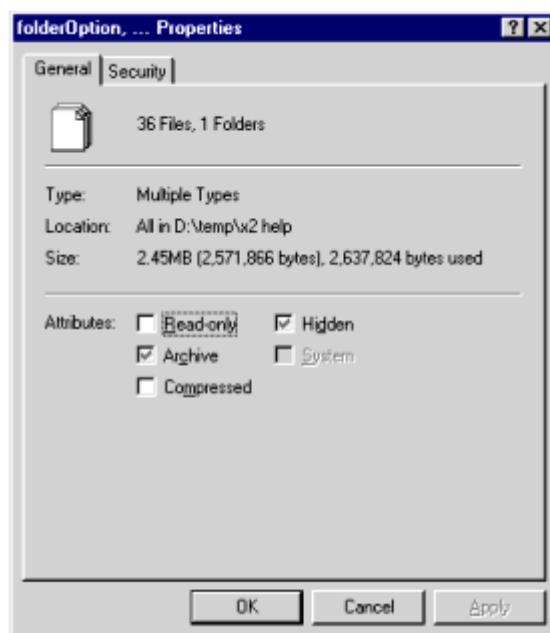
instead of <folder>.

You have to wait till the command has completed its work, because the results of this command are not persistent: If you leave the current folder in the active pane, the **CTRL+D** command is reset: the size column will show <folder> against all folders.



Tip: If you are interested only in a few specific subfolders in the folder, select them *before* issuing the **CTRL+D** command. x² will calculate their size first. While x² calculates the size of the rest of the folders, you can check the size of the subfolders of interest.

3. To know a selection's cumulative size, press **F12**. A *properties* window pops up, and shows the cumulative size of all files and folders of the selection.



Note the title bar of this window: it actually sorts all items in the selection alphanumerically, and then picks the first name. This is followed by a comma and "...", which indicate that the window shows properties of a *selection*; not a folder.

The **F12** always counts the size of *hidden system* files; regardless of whether they are visible or hidden at the moment. On the other hand, the status bar does not show the size of hidden files and folders. So unless you have set x²'s to show hidden files and folders (using the **Tools | Options...** menu), there will be an apparent mismatch between these figures.

4. To know an individual folder's size, just highlight it (in folder pane or in the tree pane) and press **F12**. A "*Properties*" window pops up (see figure below). It is very similar to the one shown above, except that this window has the *folder name* in its title bar.



It also shows the number of files and folders in the selection.

- The **F₁₂** always counts the size of *hidden system* files; regardless of whether they are visible or hidden at the moment. On the other hand, the status bar does not show the size of hidden files and folders. So unless you have set x²'s to show hidden files and folders (using the **Tools | Options...** menu), there will be an apparent mismatch between these figures.
- If your selection is in a scrap pane, and if the selected items belong to different folders, a separate **properties** window pops up for each folder.

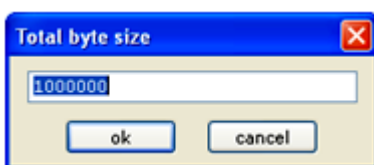
Select enough items to fit a given size

When you have a large collection to transfer to CDs, each CD ends up having a blank space in it because the next folder is too big to fit. At that point, you skip that big folder and look for smaller folders that can fit in. This ensures that all your CDs are packed to the fullest, and reduces wasted space.

This is a tedious process. x² can help you in making selections that fit the given size (such as 700 MB for a CD-R and 650 MB for a CD-RW).

Follow these steps:

1. In the **active folder pane**, load the folder that you want to split in batches of given size.
2. Select the menu option **Mark | Total size...**
3. In the window that opens, specify the target size (e.g. 700 MB, etc.) and press **OK**.
(Note that this figure is to be specified in bytes)
x² will select all items that add up to this size.



Tip: You can also use this command in the scrap panes. You can make several selections (each fitting the given size), and then move the

entries to a blank scrap pane. (Launch new scrap panes as required). When you have finished, each of the scrap pane will contain a different group, each totaling up to the target size (approximately). This way, you will be able to study the virtual groups before actually transferring them.



Warning: *When you use this command in the scrap pane, never use flattened folders; otherwise x² will group the items belonging to a folder into different groups! In other words, the folder will be spread over all your CDs and you will not be able to put together that folder!*

Disk operations

Labeling disks



To label a disk, follow this procedure:

1. Select the disk's node in the tree pane
2. Press **F2**. The existing name will be highlighted as shown in the figure on left.
3. Edit the name or enter a new name.
 - Remember to remove the drive letter in parenthesis. If you don't remove the drive letter, x² will show an error, and will not allow you to rename the drive.



- Do *not* try to re-enter the drive letter: Windows inserts it automatically.
4. Press **Enter**.

Formatting disks

To format any disk, r-click and select “**Format**” option from the context menu.

- You cannot format a floppy if some other program is accessing it, including x²! Make sure you are not browsing **A:** in any pane and collapse any tree nodes. If you still cannot format it, change your current browsing directory to other drives (such as **C:**), to ensure that x² isn't locking the drive.



Caution: *Once you format a disk, all data on it is erased forever: you can never recover it. Before attempting to format, please ensure that the data is backed up (or the data is not worth saving).*

Network operations

For all files and folders in PCs of your **NN**, the respective owners set your access rights. Within this constraint, you can carry out all file management operations on the shared files and folders in your network.

Some points to remember:

- You can see folders in your **NN** PCs only when the owners share them.
- Even then, you may not be able to change the folders you see in **NN**. For example, adding files to folders, deleting files from folders, renaming items, moving items, changing attributes. To be able to do so, you need full access to those folders.



Warning: *Be careful when you delete any item in a NN PC: the deleted item cannot be recovered, because it goes neither to your Recycle Bin nor to the remote PC's Recycle Bin. Such items simply vanish without a trace.*

- Before sharing *your* folders, always take a backup; otherwise someone in the **NN** might delete or edit your items (whether accidentally or maliciously—it doesn't matter!).

Mapping a network drive

Mapping a drive has several uses:

1. If you have to visit a particular **NN** folder often, it would be a good idea to map it as one of your drives. You can access such folder with its drive shortcut (**SHIFT+CTRL+<drive Letter>**), or by clicking the drive in the tree pane.
2. If you want to use a network path in a **DOS command**, you cannot use the UNC address in the command: you will have to first map the path on your PC (as a drive) and then use this drive letter in the DOS command.
3. Some Windows utilities do not work on **NN** folders, but they work on a mapped drive.

The mapped drives behave as follows:

- Whenever you restart your PC, the connections to such mapped drives are restored.
- If your access to the remote PC is cut off (e.g. the remote PC is switched off or crashes; or if the path is cut off because of some network problem), the mapped drive will be inaccessible. Once that happens, you have to restore connection manually (Even if the remote problem is resolved, the drive will not refresh automatically.)

Network mapping can be done only on top-level shared folders in any **NN** PC: You can't map their subfolders.

To map a folder shared on a **NN** PC, locate it in the Tree Pane (or in the Folder Pane) and r-click on it. From the context menu that appears, select "Map Network drive" option.

The following window appears:



- Select a drive letter that is not assigned to a drive yet.
- Enter your login name in the “**Connect As:**” field. Normally, entering your PC name in this field should work.
- If you want to connect to the mapped drive only for the current session, *uncheck* the “**Reconnect at logon**” checkbox at bottom.



Tip: Once a drive is mapped, you can rename its node in the **Tree pane**, to remind you of its purpose.

Unmapping a network drive

To unmap a network drive, locate it in the **Tree Pane** (or in the **Folder Pane**) and r-click on it. From the context menu that appears, select “Disconnect” option.

- The drive letter assigned to that mapped drive becomes free. You can re-assign this letter to other mapped drive.

6. Advanced features

Attaching additional information

We have already seen that the **comments** command allows you to attach text to any item.

In addition, on NTFS drives, you can attach additional information to files, such as Author, Title and even comments.

To attach this information, select the file and press **F₁₂** (or use the **Summary** tab of **File | Properties** menu option). In the dialog box that pops up, select the **Summary** tag. This tag has several input boxes. Enter the details and press **OK**.

Many of these fields appear as **columns** in x². You can conveniently browse these columns and also search for any desired text in this information.

Copying items' names into clipboard

This command set allows you to copy either the full name or the 8.3 name (also known as *DOS name*, because the early Disk Operating Systems from Microsoft used this format before the advent of Microsoft Windows).

The 8.3 name is called so because its base name can have a maximum of 8 characters and its extension is 3 characters long. Longer names are truncated with a tilde (~) followed by a running number. (If the first few letters in the names of multiple files are common, their 8.3 names will be distinguished by different numbers.) All spaces are removed.

For example, the 8.3 name of **User manual.doc** could be **USERMA~3.DOC**, if the same folder already has two files having names **USERMA~1.DOC** and **USERMA~2.DOC**.

To copy item names into clipboard, make your selection and-

Press	What it copies into clipboard
ALT+C	Item names (including paths) separated by linefeed
ALT+SHIFT+C	8.3 names (including paths) separated by linefeed
CTRL+ALT+C	Item names (including paths) in a comma-separated list
CTRL+ALT+SHIFT+C	8.3 names (including paths) in a comma-separated list

**Tips:**

1. How to remember these commands: The **ALT+C** part is common in all commands. Additionally, press **SHIFT** for 8.3 names and **CTRL** for comma-separated names.
2. x² always includes the path in the item's names. If you do not want the paths, or if you want to copy only a file's base name, then use **Copy Path**.
3. There is an alternative trick that works for *only one* item at a time: Select the item and press **F₂** (to get only the base name) or **CTRL+F₂** (to get the item's name *and* extension). x² enters **edit mode**, and highlights the item's name. Press **CTRL+C** to copy the highlighted base name into the clipboard. Then press **ESC** to exit from the *edit* mode.

There are multiple uses of such information:

- Paste this list into a PIM (Personal Information Manager). Add your remarks about these files.
- Paste this list in a spreadsheet like Excel; and then use its **data | Text to columns..** command. Specify that the data is delimited by “\”. Thus you will split each line into columns, where each column contains a folder name, and the columns to its right contain the names of its subfolders.
- Some applications require you to attach/insert a file. For example, Internet email, chat or instant messenger. These applications typically provide a browse button, so that you can manually locate the file. But such applications can’t help you in locating the file. If you have to attach or insert multiple files this way, it becomes drudgery indeed! Instead, you can first locate all the files using x²’s far superior search capabilities. Then for each file, copy the filename (including the path) from x², paste it in the other application and paste **OK**.
- Some DOS functions need the file’s “DOS” name as argument. Paste the 8.3 name of the file in such places. Using x²’s **DOS console** helps.
- The base name only is useful to name other files based on a given file’s name, by entering a suffix, editing the name, etc.
- **Take a print** of this list and use it as a checklist.

Caution: *This command always copies the names in ascending order, regardless of what sorting order you have used in the folder pane (or a scrap pane). So if you intend to use the information in a certain way, do not rely on the source pane’s sorting order.*



Copy preview of the selected item

It is useful to copy the item’s preview image as bitmap. This image can be pasted into any document. To use this command, select the item and select the menu option

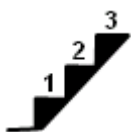
Tip: this command will not work for all items, because not all items have preview images (see the table below).



Preview image	No preview image
<ol style="list-style-type: none"> 1. Image files (bmp, jpg, png, etc) 2. PowerPoint (ppt and pps) 	<ol style="list-style-type: none"> 1. Folders 2. Other MS Office files (xls, doc, mpp, etc) 3. Archive files (zip, arc, rar, etc) 4. text files (txt, rtf) 5. pdf files

Copy columns

This command is very similar to “**copy names to clipboard**” command



described above; except that this command copies the text from *all the columns* of the active folder pane. To execute this command:

1. Ensure that all columns you want are available
 - a. To change columns (or their sequence of appearance), use the **ALT+K** command.
 - b. You can also change the **pane's style** (*list* or *details*)
2. Make your selection (only selected items will be placed on clipboard)
3. Press **CTRL+P** (or select **Edit | Copy columns** menu option)
 - a. If you press **CTRL+ALT+P**, text from only the *active* column (i.e., the column that is used for the **primary sorting** of the pane) will be copied

Now you can open another application (such as a text editor, Microsoft Excel or a Personal Information manager) and paste the contents of the clipboard there. Also see how to **print this report**.

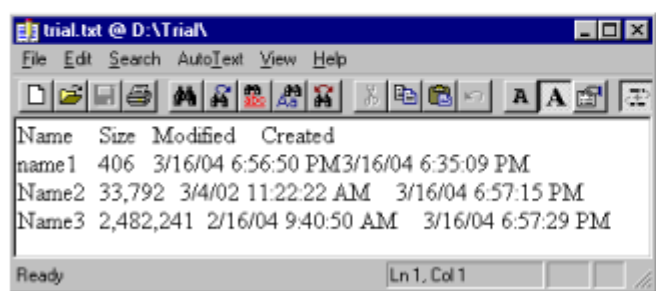


Tip: The text placed on the clipboard contains the **column headers** also. Usually this helps you in treating them as column headers in the other applications such as Excel (Simply select the first row and give it a different format, such as making it **bold**, increased font size, etc. The spreadsheet will automatically accept this first row as column headers.) However, in some cases they may be wrongly treated as data. So, if you do not need them, remove them after pasting.

The following figure shows an example of pasting in a text editor. Note that the columns appear out of alignment because Editor² converts each tab into a certain number of spaces. This problem won't be seen if you paste the data in a spreadsheet like Excel: the data will be automatically pasted in different columns.

Name	Size	Modified	Created
name1	406	3/16/04 6:56:50 PM	3/16/04 6:35:09 PM
Name2	33,792	3/4/02 11:22:22 AM	3/16/04 6:57:15 PM
Name3	2,482,241	2/16/04 9:40:50 AM	3/16/04 6:57:29 PM
Name4	1,769	7/4/03 11:41:56 AM	3/16/04 6:57:51 PM

Select these files and press CTRL+P ...



Open another application and paste (CTRL+V). This produces a TAB-separated list. (shown in Editor² here)

Copying only the structure of a directory

This powerful command copies an entire directory structure into another place, *minus* its contents. All the subfolders of the original directory are copied recursively, but files in them are not copied.

The original directory is not affected by this command at all. To copy structure, follow these three steps:



1. Select the top-level folder and press **CTRL+C** (or select the **Edit | Copy** menu option)
2. Go to your destination folder (the folder where you want to place the copied structure).
3. R-click and from the context menu that pops up, select the **Paste special | Folder structure** menu option. (Instead of the context menu, you can also use the **Edit | Paste special | Folder structure** menu option.)

This command has many practical uses:

- You have a CD on which you have collected articles on various subjects. You would like to cut more CDs with exactly the *same* folder structure, to maintain a uniform directory structure in all CDs.
- You visit a network neighborhood PC (or a server) and like the well-organized subjects there. You would like to create a similar folder structure on your PC.
- You might be using up to three PCs (one PC at work, another at home and also a laptop). You may maintain some files on all these PCs. You would like to create exactly the same folder structure on all your PCs, so that you don't have to remember your way around. (Wherever you are, you'd like to see the same familiar folder structure.)
- In that multiple PC environment, you like to work on the same files at work and then take them home and continue working. For that, you have to synchronize the directories in both PCs on a daily basis. That means you need to have identical folder structure in both PCs.

Hey these are pretty usual needs. Why didn't we do it earlier?

We never did this before because doing it with Windows Explorer had some serious problems. With Windows Explorer, you can follow two different optional methods to copy structure; and *both* have problems, as we will see:

- Copy the entire top-level folder to a new place (along with its subfolders and their contents). Now find all files in this directory by launching a search with *.* as your search condition. Explorer will list all files in the directory. Select all of them and delete. This will leave an empty folder structure that is identical to the original folder system.

The disadvantage in this method is that you need a huge free disk space at the destination drive, because the entire contents of the original directory have to be accommodated there *before* you start deleting them.

- Creating each subfolder manually. This is an extremely laborious method if you have to create large directory structures. You may make numerous mistakes, which requires enormous correction effort. Besides, if you don't realize your mistake, you will actually create a different subfolder!

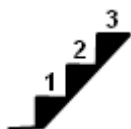
So you see now how x² can make file management so easy!

Copying to multiple folders

Sometimes you want to copy your selection into *multiple* folders. Typical applications are-

1. You have the practice of backing up selected files into multiple disks (or even remote PCs) to make sure that at least one copy will survive (disaster management)
2. You want to distribute selected files to multiple PCs that normally do not have access to your own collection (which may be much larger and also contain items that the others must not access).
3. You maintain a digital library spread over multiple servers, and want to upload documents to multiple remote servers

The actual procedure is as follows:



Copy source items	Paste them in target folders
<ol style="list-style-type: none"> 1. Select your items in folder pane or a scrap pane 2. Press CTRL+C (or select the menu option Edit Copy). This puts your selection into the clipboard. 	<ol style="list-style-type: none"> 1. Select the target folders in a folder pane (if they are not in a single folder, collect them in a scrap pane first and then select them). 2. If you are working in a <i>folder</i> pane, select the menu option Edit Paste special Multi paste. <p>OR</p> <p>If you are working in a <i>scrap</i> pane, select the menu option Edit Multi paste.</p>

Note that you have to specifically select the target folders: Unselected folders in the pane will not receive the clipboard contents.

Checking builds

This function compares modification dates like the synchronization command (**F9**); but instead of comparing files with identical names, it compares the source file with its derivative (transformed) file. This function actually takes advantage of the fact that a source file and its object file have the same prefix, but different extensions.

For example, when file *Flight.cpp* is compiled, file *Flight.obj* is generated. (As discussed, only the extension has changed; not the name.)

Logically, each object file should have a modification date which is same (or later than-) its source file's modification date. If this is not the case, we conclude that the object file is outdated (in other words, the source file was modified *after* the last compilation). It means we have to compile that source

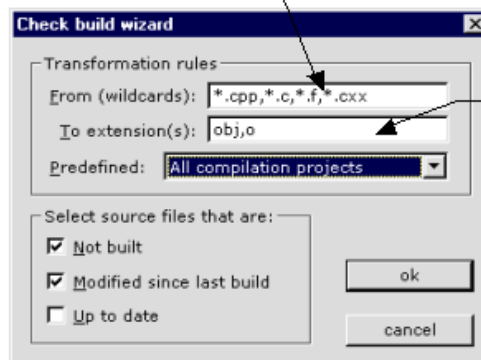
file again. For some source files, the object files may be missing. x² can identify such files for you, so that you can compile those files.

For the comparison, follow this procedure:

1. Load all source files in the active pane and the object files in the inactive pane.
2. To specify the conversion rule to be checked, press **CTRL+F₁₂** (or use menu option **Mark | Check build**). A window pops up:



Extensions of Source files
(separate with commas)



Extensions of compiled files
(separate with commas)

- In the **From** field, enter the source file name wildcard patterns (or select from predefined)
- In the **To** field, enter target filename extensions (or select from predefined).



Tip: Note that a generic **wildcard** is accepted for the **From** field whereas the To field must be just the target extension(s), without the “.” (e.g. type **o** instead of **.o**)

- Select what types of files you want highlighted



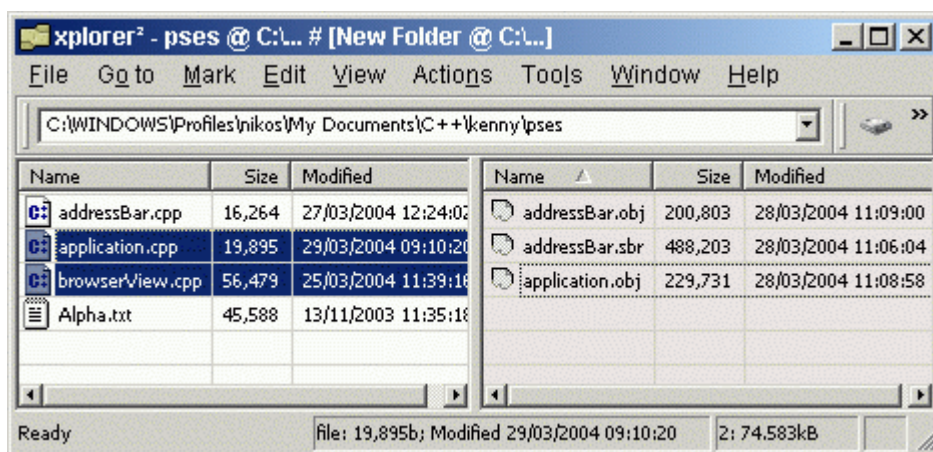
Tip: Both “not built” and “modified since last build” options are selected by default. When selected *together*, they cover all files that require re-building.

3. Press **OK**. x² automatically identifies each “source file-object file” pair from the opposite panes, and compares their modification dates. x² marks files according to the settings you selected.

4. **ALT+F₁₂** repeats the last build check command without using the dialog.

After that, it is up to you what to do with these outdated object files: Most probably you’d want to generate a **script file** that executes the compiler for each source file.

Note that this function can’t check for complicated dependency patterns (headers etc) like the **make** command does, but it’s useful nevertheless. An example:



Using the options on a pair of hypothetical source and target folders, x² marks all source files that require compilation.

1. The file **application.cpp** was modified after it was last built (the date of its target **application.obj** is older), so it is marked.
 2. The file **browserView.cpp** hasn't been compiled at all (there is no file called **browserView.obj** in the inactive pane), so it is "not built" and hence marked.
 3. The file **addressBar.cpp** is up to date, so it is not marked.
- The file **Alpha.txt** is completely irrelevant for this transformation rule so it is left unselected.

DOS and Windows commands

As described in [chapter-4](#), you can issue DOS and Windows commands directly from the Address Bar. Apart from that, x² has many other convenient features to handle DOS and Windows commands, as shown below:

Compose commands like a formula

You can construct commands and pathnames like a formula, using variables called "tokens". The advantage of using tokens is that you can repeat the command without having to type different filenames each time.

Let us see two examples involving Windows and DOS commands:

Command	Remarks
> windiff "\$N" "\$I"	Launches the Windows utility windiff with two files as arguments. The tokens \$N and \$I pass the files selected in active and inactive folder panes, respectively.
Strid \$f	Runs the DOS utility trid with a target file's path (in 8.3 format) as argument.

Refer to [Appendix 9B](#) for the complete list of tokens.

Note:

For programs launched from the Address Bar, you may need to enter their full path. However, if this path is already defined in the *paths* environment, you need to enter only the command's name.

For example, instead of entering-

> **c:\tools\windiff.exe \$n \$i**

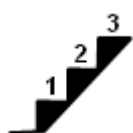
You can enter-

> **windiff.exe \$n \$i.**

Provided that the path **c:\tools** is already entered in the path environment.

Borrow filenames and paths from folder panes

Usually, a DOS or Windows command requires the name and/or path of a file or a folder as its argument. Using the Address Bar, you can easily insert the name/path in such commands:



1. In the active folder pane, select the item whose name and/or path you want to include in the command.
2. Place your cursor at the desired position in the Address Bar
3. Use one of the following shortcuts to insert the focused item's name and/or path at the cursor point:

Keyboard shortcut	What is inserted
CTRL+Enter	Name
CTRL+SHIFT+Enter	8.3 name
CTRL+ALT+Enter	Fullpath+name
CTRL+SHIFT+ALT+Enter	8.3 fullpath+name

Note: Windows filenames are typically longer than 8 characters, and also contain spaces. The composer assistant automatically generates 8.3 names from such filenames.



Tip: How to remember these commands:

- **CTRL** and **ENTER** keys are used in all commands.
- Use **SHIFT** to insert 8.3 versions of names
- Use **ALT** to insert paths also.

4. While composing a command in the Address Bar, you can move the focus to a different item using **CTRL+Arrows**. However, you must *not* go to a different folder to find a new item: As soon as you load a new folder in the active folder pane, the Address Bar will discard the partly composed command and display the path of the new folder!

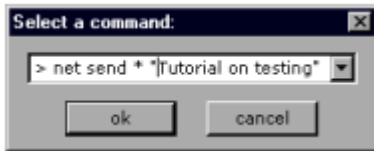


Tip: If you need items from multiple folders to compose commands, first collect all of them in a scrap pane. Then use the Address Bar of the scrap pane to compose your command.

Reusing DOS/Windows commands from history

x² maintains a history of all the DOS and Windows commands. You can select any past command from a pull-down list and issue it again.

5. Although commands are originally composed in the Address Bar, they are not listed in pull-down list of the Address Bar: x² has a separate window to list past commands. (This arrangement simplifies the pull-down list of Address Bar, which contains only addresses.)



To reuse a command from the history list, press **CTRL+F₁₀** (or use the **Tools | Run history** menu option). A window pops up (see figure on left). Using the pull-down menu, select a command. Edit the command if required, and press **OK**. The command is issued.

To repeat the last executed command without any changes, press **ALT+F₁₀** (or use the **Tools | Repeat command** menu option). However, keep in mind the following factors:

- If you are running multiple copies of x², this “last executed command” could be actually issued by another copy, not by the copy where you are currently working.
- Even if you are running a single copy, this command could be the last command executed in your last session.
- The command is executed without any confirmations, so you will *not* get to see the command before you press **OK**.

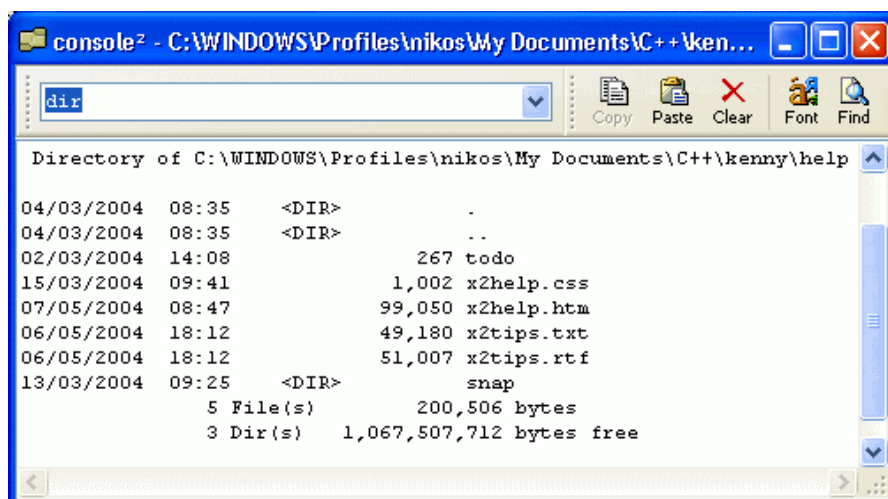


Caution: *Do not use this command if you are not sure which command you executed last. Since x² fetches the last command executed by another copy running in parallel (or even from a previous session), this could turn out to be risky, or give you unforeseen results! DOS command console*

Most DOS commands don't have a **GUI** of their own and rely on the console window for their output. This is the traditional black & white system DOS box, which is rather awkward to use.

The *PRO* version comes with a substitute console that is nearly equivalent in functionality and much easier to work with. It has the following facilities:

- You can mark (highlight) *multiple* lines
- You can copy and paste multiple lines of text, as in a text editor
- You can search for text
- The console automatically focuses on the active pane: as you browse folders with x², it changes its current directory. (The working path is shown on its title bar.)



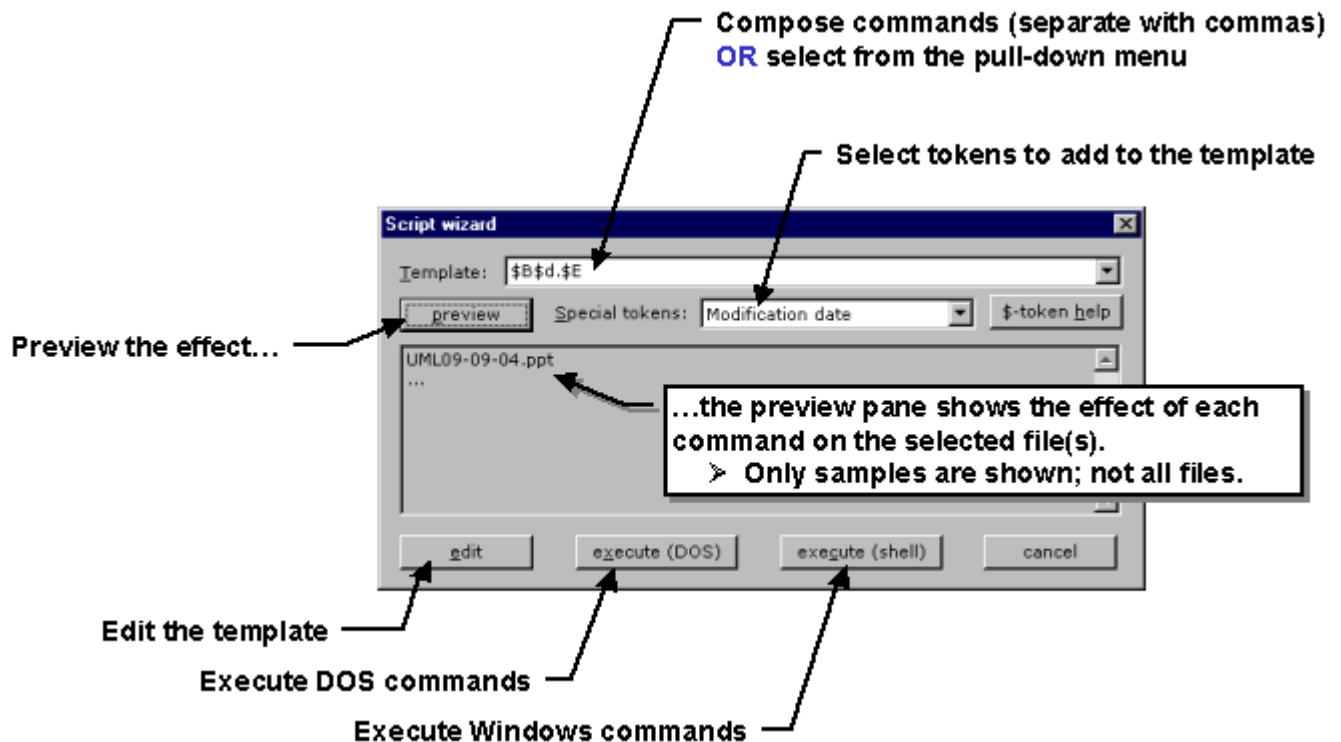
The console serves the following functions:

- It receives the output of all \$-prompted commands issued from the Address Bar of x² and also from command **scripts**.
- You can deliver input to running programs (e.g. Y/N responses).
- You can also type DOS commands directly in the console window. This input area supports path autocompletion with **F₁** and also maintains a history of past commands. The DOS console pops up automatically when you enter a DOS command in the Address Bar. However, you can also launch it for the current folder: Just type \$ in the Address Bar (without any command) and press **Enter**.
- If you still prefer the traditional DOS console, you can disable the Command Output Redirection Console using the **Tools | Options | General** menu option. Note that in such a case you will get a separate console *for each* command you execute.

Automatic script generation

Commands launched from the Address Bar operate only on the single focused item within the folder being browsed. If you want to apply *multiple* commands to a *number of files*, this technique is not useful. (For example, for batch conversions of MP3 files.) It is more convenient to use an automatic script generator, which can run a sequence of commands on all the selected files in one stroke.

- To start the script generator, first select all files and then press **CTRL+B** (or use the **Tools | Command script** menu option). The **script wizard** window pops up, as shown below:



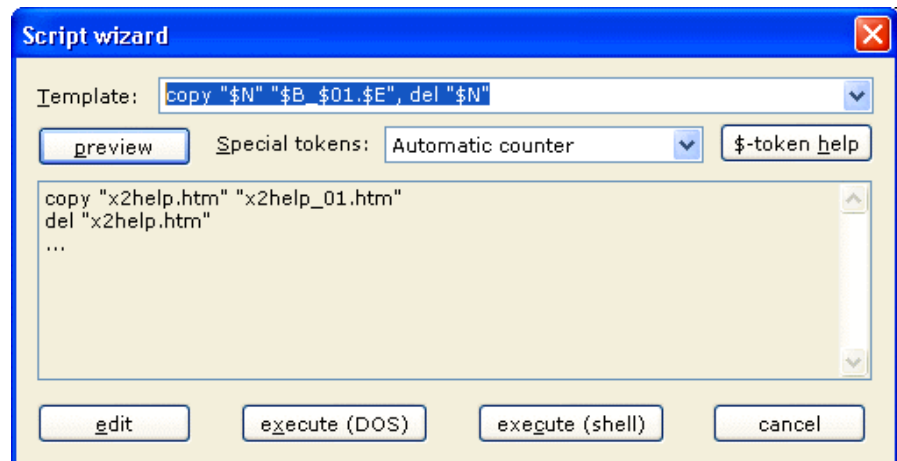
Specify a command **Template** that will be applied to each and every *selected* file.

- You may enter more than one commands in the template: just separate them with commas.
- The syntax of each individual command is identical to the commands used in Address Bar: the familiar **\$-tokens** are used in place of actual file names. In each command, the plain text part is reproduced verbatim and the tokens are replaced with elements of filename (or path) on a per-file basis. The script generator picks the first file in the selection, and runs all the commands in the given sequence. Then it picks the next file in the selection and repeats all commands in the same sequence. It continues this cycle till all the files in the selection are dealt with.
- So, if your selection has 100 files, then 100 sets of commands will be generated and run, effortlessly.



Caution: *Sometimes a batch processing can create unforeseen conflicts in filenames. For example, when you use the automatic counter, it may try to rename a file with a name that already exists. Let us have an example:*

We enter **ren "\$N" "\$B_\$01\$\$. \$E"** in the template and select two files: **x2help.htm** and **x2help.ccs**.



This template has four special \$-tokens:

Token	What it represents-
\$N	Whole name (Filename with extension, including the dot)
\$B	Base (only the filename, <i>without</i> the extension and the dot)
\$E	Extension
\$01	An automatic counter starting from 1 with a <i>single</i> leading zero

Note: The double dollar (\$\$) is an *escape character* for a single \$.

For each file, the generator copies the constant parts of the template (including spaces, underscore and quotation marks) and substitutes the variable parts using the file in question.

The example above shows two different commands: the first command creates a copy of the file. The new copy has an automatically incremented suffix. Then the second command deletes the original file, leaving only the renamed copy. The net effect of this script is that all files will be *renamed* with a running serial number as their suffix. (We could have used the **ren** command directly, but this example illustrates how the script works.)

Notice the following:

1. The counter has automatically incremented to **02** in the second line.
2. The **\$\$** in the template was translated to a single \$ character in the filenames.
3. The preview pane shows two lines; each showing the effect of one command (here, only the first file of the selection is displayed).

For our two files, the combined effect of the two commands is equivalent to:

```
ren "x2help.htm" "x2help_01$.htm"
ren "x2help.ccs" "x2help_02$.css"
```

Note: If the filenames are likely to contain spaces (usually they do), you *must* use quotation marks around the filenames in the template. When the script generator converts the template into command, it takes these quotes as literals. As a result, the filenames get enclosed in quotes.

Once the script is generated, there are three alternative actions:

- **Execute (DOS).** This is the mode you would most often use: running a batch file in DOS. Behind the scenes, a file called **x2tmpScript.bat** is created in the %TEMP% directory.
- **Execute (shell).** This is the script equivalent of >-prompted windows program execution. In this case, templates must contain Windows commands only; and *not* DOS commands like **ren** (which require the DOS interpreter).
- **Edit.** Instead of immediately executing the script, you can edit it (perhaps to add a few final touches). If you are in dual-pane mode, the inactive pane will focus onto **x2tmpScript.bat** so that you can easily execute the final script by double-clicking, after you save your changes.



Caution: *The wizard merely manipulates the strings and is oblivious about their meaning or command syntax. If you make any mistakes you will notice them only during execution!*

Taking a print

All operations in x² are completely paperless; so you will never need to take any print. In fact, the next chapter shows that you can achieve much, *much* more than plain file-management *with absolutely no paperwork*. Therefore, x² does not provide any printouts.

Yet, if you insist on paperwork, then x² *does* have some outputs worth printing.

1. To print the *contents* of any file, select it and press **Enter**. That will open the file with its default application (Microsoft Word, Excel, PowerPoint, etc). Now use the **Print** command of this default application.
 - For graphic files, you may use Irfanview or XnView.
 - For text files, use the built-in text-editor **Editor²**
2. The following four commands copy different contents into the clipboard. You can exploit this by pasting this content in a file of suitable type (Microsoft Excel, Word, etc).

Command	Where used	What is saved on clipboard
ALT+C	Folder/ scrap panes	Names of selected items with path
SHIFT+ALT+C	Folder/ scrap panes	Names (8.3 format) of selected items with path
CTRL+P CTRL+ALT+P	Folder/ scrap panes	Column text
CTRL+C	Folder statistics (ALT+D) window	Folder statistics for the selected node

But even there, you don't get much benefit if all you want to do is to take the printout of raw data and start ticking (or crossing out) these entries: you can do all that in an instant within x² (Using the scrap panes or comments)!

Instead, we suggest you should use the other application for some data processing (e.g. statistical analysis, or making segregated lists), and *only then* take a print. To generate such tables, use **Pivot table** command in Microsoft Excel (or the **DataPilot** command in its freeware equivalent, OpenOffice Spreadsheet).

Note that these spreadsheet programs will add an extra column that shows some statistical summary (e.g. sum, count, minimum, maximum, etc). In most cases, you will have to hide this column. In some cases, though, you may want to *use* this statistical summary: You can even generate charts (such as pie charts and bar charts)!

Some sample printouts are given below. They are chosen to demonstrate how different columns in x² can be exploited.

These are just sample reports: you can create a mind-boggling variety of reports and take a print!

If you like digital photography, then printouts like the following sample can help you in systematically editing your photos (or to simply maintain a master-list of your photos). You can use any combinations of **EXIF columns** to create a large variety of reports. You can also add a column to describe some interesting facts about each photo (about the place, people appearing in the photo, the occasion on which it was taken, etc)

Photo list

Zoom	File name	Date taken-
35 mm		
80 mm		
200 mm		

↑ ↑
EXIF columns

A printed list like the sample below could serve as an index card for your CD albums. There are a lot of **MP3 columns** to choose from.

Song list

Artist	Album	Title	Duration
Britney			
Madonna			

⏟
MP3 columns

In the following example, we have exploited **comments** that can be attached to any file. Keeping the following printout in mind, we had inserted a few “standard” phrases in the comments field; and here we simply consolidated the files based on those comments.

You can use such a list to prioritize your tasks.

Task Priority list

Finish date	File name
Most urgent	
5 th October	
December end	

↑
“Finish dates” are actually text tags,
inserted by x² in the *comments* column!

Actually this table shows *manipulated* data: when we copied the columns from x², the first column was **comments** (which holds free text; and *not* a date)!

However, in our example, we had inserted comments identifying deadlines. So, although **comments** is a *text* column, we could extract *date*-related information from it. After consolidating the data, we have renamed the table's header to "*Finish Date*".

In general, the **comments** column can take any free-form text, so you are free to enter any string and later interpret it any way you want.



Tip: The **comments** field may contain several strings, concatenated with a string-separator character such as a semicolon. (Insert each string to serve a different purpose.) When you copy the columns to Excel, you will get *all* these strings; even if some of them are not useful for your current exercise. You may have to clean up the data a bit to serve your purpose. On the other hand, by separating the strings you get several columns; each column representing a different aspect. You may also have to use other data-manipulation in Excel (such as filters) to search for the desired strings and prepare a summary chart as shown above.



Tip: From the very beginning, you should decide exactly what type of comments you would be inserting, and how you will be using them later. **Chapter-8** explains this concept in detail.

3. Apart from these manipulated reports, x² also has three text-formatted reports which can be printed straight-away:
 - **Search status report**
 - **Missing file report** (when a CIDA file is loaded)
 - **Error log report** (for each **Robust File-Transfer** dialog)

These reports can be directly copied to the clipboard using the **CTRL+C** command. Then open a new file of suitable type (Microsoft Word, Excel, PowerPoint, etc). Paste the contents of the clipboard with the **CTRL+V** command. Then take a print as described in point-1 above.

This method prints text as you see it in the report, but you may want to process the information before taking a print (for example, create a summary, or consolidate the records in different groups). In that case, first paste the text in Excel, and then parse (chop) it into columns, using **Data | Text to columns** command in Excel. This allows you to consolidate the data as shown above.

Inspecting the ADS contents of a file

Some malicious trojans like keyloggers may hide in ADS of a legitimate file. With x², you can locate files with suspect ADS contents, and then inspect the streams.

A typical file has two ADS streams:

1. A stream contains its user-access information
2. Another stream has the actual contents of the file.

While the first stream is very small, the second stream is as large as the file.

When you attach **comments** to a file, this creates a small third stream.

So, if a file has more streams (or large streams), then they are suspect.

Here is the process to find such files and inspect their ADS streams:

1. Launch a **search** command. In the *Additional rules* section, select the **Streams** column. Set the *Min* value to 4 in this rule, to find files having 4 or more streams. (Leave the *Max* value blank)
2. Once you locate the suspect files, investigate them further by using the **Actions| ADS| View streams** menu option.

Caution: *This is a specialized subject, and best done by experts. If you do not have adequate expertise in this area, you may miss malicious contents.*



7. Customizing x²

x² is highly customizable. You can change the following elements of its screen:

- Icons
- Layouts (change relative size of panels, show/hide different parts)
- Toolbars and individual buttons in these toolbars
- Column sets that appear in the panes (only in **details** mode) and
- User commands

Apart from these customizations, you can also change how x² responds to your commands, by setting **program options**.

The following sections show how to exploit this customization:

Customizing icons

x² supports customization of icons. You can change the icons for files and folders with a suitable icon changer utility.

The icons can be changed globally or within a certain folder.

Changing of icons serves the following purposes:

- To personalize your screen
- To use an icon that better suits your taste
- To display certain folders more prominently in the tree/pane.
- To categorize files into various classes (e.g. personal/family/office)

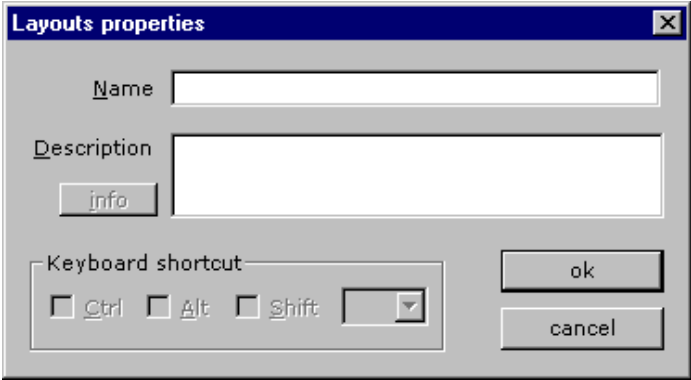
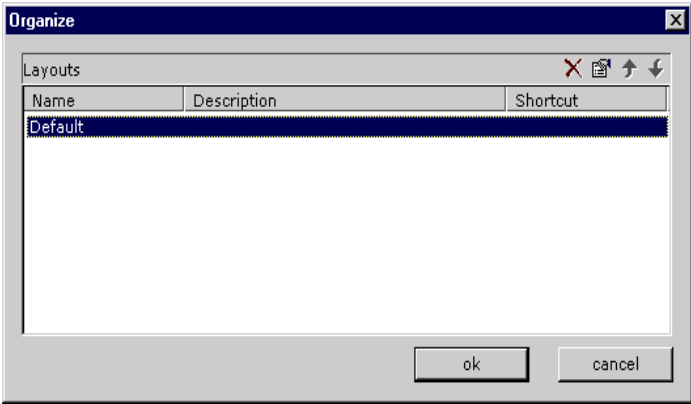


Customizing layouts

We have already seen a brief discussion about changing the display styles of the folder panes in **chapter-3** and **chapter-4**.

This section describes how to achieve more permanent changes.

Once a layout is changed, x² remembers the new layout forever. Whenever you start x² (or the PC), the same layout will be presented to you.

But the customization does not stop here: you can save *multiple* screen layouts and load them whenever you want. The following table explains how to use customized layouts:

<p>Save a layout</p>	<p>Use the Window Save layout... menu option.</p> <p>The following window pops up:</p>  <p>Enter a name that best matches the purpose of this layout. Also enter the description (the purpose for this layout).</p> <p>At a later stage, using Layouts Organize, you can define a keyboard shortcut for the layout: just put a tick in the relevant checkboxes and select a letter. This key combination will henceforth serve as your keyboard shortcut for this layout.</p>
<p>Apply a layout</p>	<p>The Window menu lists all saved layouts. Simply click on the desired layout. X² launches a new window with the selected layout.</p> <p>Note that x² will <i>not</i> apply the selected layout to the current window. (Full <i>layout customization</i> feature will be released in future.)</p>
<p>Delete or rename layouts</p>	<p>Use the Window Organize... menu option to delete or rename any of the saved layouts.</p>  <p>All the saved layouts are listed. Select any layout and press the  button to delete it, or the  button to edit its properties.</p>

Customizing toolbars

Toolbars contain buttons for frequently needed commands.

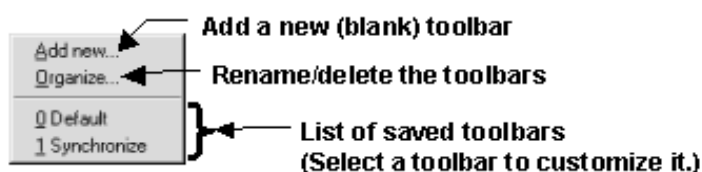
Every user likes to have a different set of commands on the toolbar, in a particular desired sequence. Toolbar customization is the answer.

You can customize the toolbars as follows:

- Add new toolbars (or delete some toolbars)
- Hide/show toolbars
- Add (or delete) buttons in existing toolbars
- Move the existing buttons to new position within a toolbar
- Move the toolbars to new positions within the toolbar area
- Resize the toolbars
- Add text labels to the buttons on any toolbar

To customize the toolbars, use menu **Customize | Toolbars**, or right-click on the toolbars and use the context menu.

- Let us see the *menu* method first. When you select **Customize | Toolbars**, the following submenu appears:



- The toolbar works as follows:

Add a toolbar

When you select the **Customize | Toolbars | Add** submenu, a dialog box pops up:



Enter a name for the new toolbar and press **OK**.

Apart from the main toolbar, you can create up to 14 additional toolbars.

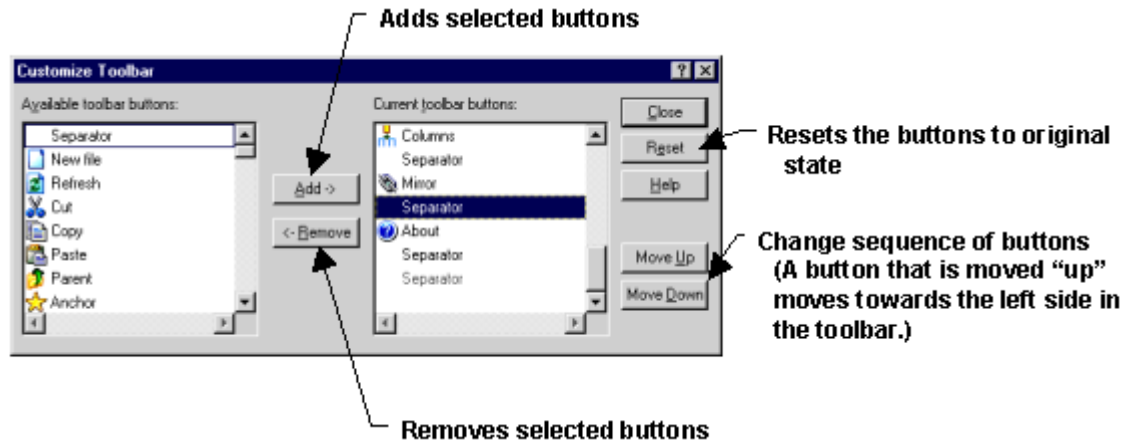
Tip: Organize extra toolbars in a task-oriented fashion, by bunching relevant buttons together. Whenever the need arises you activate the toolbar using the menu option **View | Toolbars**. (Hide the other toolbars that are not required.)





Tip: Provide a meaningful name to each toolbar: it will help you in selecting the right toolbar.



Add/remove buttons

The **Customize Toolbar...** window (shown below) Pops up automatically when you define a new toolbar. You can also trigger it by r-clicking on any toolbar, and selecting the **Customize...** option from the context menu.



-  **Layout**
-  **Folder group**
-  **Column set**
-  **Bookmark**
-  **User command**

Note that you can also drag-n-drop the buttons across the two windows to add/delete the buttons. You can also use the drag-n-drop method to move the buttons up/down.

A simpler way to rearrange buttons is to drag them around while holding **SHIFT**. If you drag them off the toolbar they are removed.

Note that 45 spare buttons are provided for the customized *layouts*, *folder groups*, *column-sets*, *bookmarks* and *user commands* (9 buttons are reserved for each category).

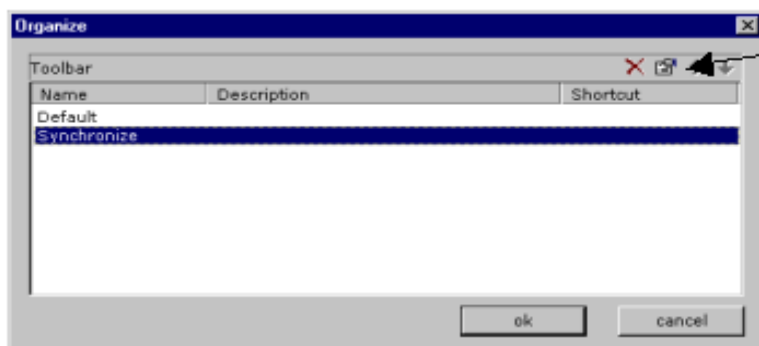
When you define new items in these categories, they appear in the corresponding menus. Out of these, the first 9 items in each list are automatically assigned to these buttons. (The **Customize Toolbar...** window displays the newly assigned names for these buttons.)

These customized buttons can be placed in any of the 15 toolbars.

Rename or delete toolbars

Select the **Customize | Toolbars | Organize...** submenu.

The following dialog box appears:

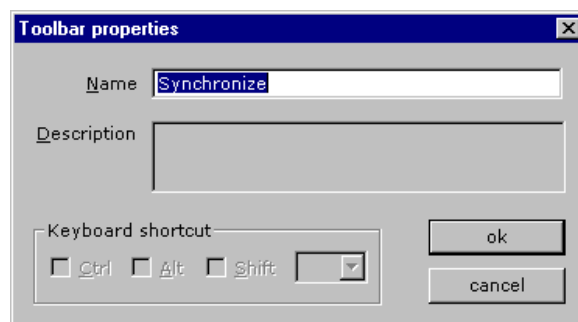


Buttons to-

- Delete the selected toolbar
- Rename the selected toolbar

Select a toolbar from the list and press the relevant button.


- To delete the selected toolbar, you can simply press **DEL**.
- To rename the selected toolbar, press the **properties** button. The following window pops up:




x² allows you to only rename the toolbar. (There are no other editable properties.)







Move the toolbars



You can move a toolbar to new place by dragging its handle  (located on the left edge of the toolbar).

Tips:

- When you drag the toolbar, the cursor turns into , suggesting that only a *horizontal* movement is possible. Despite that, you *can* move the toolbar *vertically also* (to a new row).
- The movement of toolbars is limited within the toolbar area: you *cannot* drag any toolbar to a separate area on your screen.
- When a toolbar is made too short, some of its buttons are hidden. In such case, a >>> symbol appears on the right edge of the toolbar. To reveal the hidden buttons, click on this symbol.
- When multiple toolbars share a row, and if any toolbars overlap, then the toolbar on the right will cover the toolbar on its left.

Resize the toolbar	<p>If you go on clicking on the toolbar's handle repeatedly, the toolbar size changes cyclically, as follows:</p> <ol style="list-style-type: none"> 1. Take up the entire row 2. Return to its ideal size 				
Add/remove labels	<p>You have the option to label the toolbar buttons. Labels help us in recognizing the symbols, as shown below:</p> <table border="1"> <thead> <tr> <th>Without labels</th><th>With labels</th></tr> </thead> <tbody> <tr> <td></td><td></td></tr> </tbody> </table> <p>This feature is very useful in the following cases:</p> <ul style="list-style-type: none"> ➤ New users can't recognize the symbols in the beginning. They can keep the text activated. ➤ All buttons for customized commands (e.g. column layouts, customized commands, etc.) share a common button image. These buttons need to be identified with labels. <p>But the penalty is the increased size of the toolbar. Experienced users may turn off labels for selected toolbars.</p> <p>To activate/deactivate labels, simply right-click on any toolbar and select the Text labels option from the context menu.</p> <p>Note: Depending on your needs, you can decide which toolbars will have labels and which won't. However, it is not possible to display the text labels <i>selectively within a toolbar</i>: either all buttons will have text labels, or none of them will have text labels.</p>	Without labels	With labels		
Without labels	With labels				
					

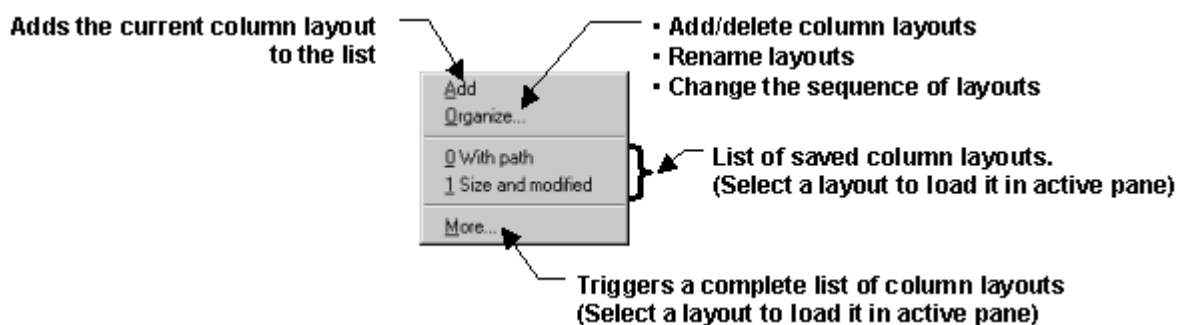
Customizing column sets

You can save different column layouts and then *instantly* switch to the desired column set without having to add and remove columns each time.

This is a very useful feature: while viewing the panes in **details** style, you may want to use different columns for different purposes, as the following examples show:

Purpose	Columns used (typically)
Normal browsing	<i>Name, size and modified date</i>
Browse a flattened folder	<i>Name, modified date and path</i>
Folder synchronization	<i>Name, size, modified date and path</i>

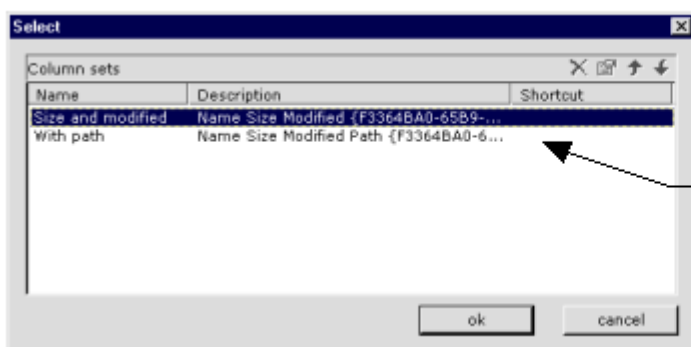
Let us see how to make use of this customization. When you select the **Customize | Columns set** menu option, the following submenu appears:



All the commands related to column layout management are in this submenu, as explained below:



To save a new set of columns	<p>Select the submenu option Add.</p> <p>The current column layout will be added to the existing list in the menu.</p> <p>Tip: You can first configure column layout using the ALT+K command.</p>
Switch column layout	<p>All the saved column layouts are displayed in the middle of the submenu (as shown above). Click on the desired set, or press the number (0-9) displayed against each option. The selected column layout will be loaded in the active pane.</p> <p>Sometimes, you may not be able to visualize a layout based on its name. You need some more information. In such cases, select the submenu option More.... The following dialog box pops up:</p>



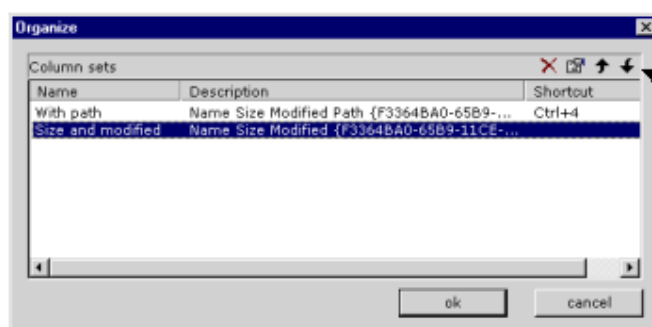
Complete list of all layouts with details
(Select any layout to load it in active pane)

It provides all details about the layout; such as the columns selected, the sequence in which they appear; and also the keyboard shortcut for each layout. Click on any layout (or use the keyboard shortcut) to load it in the active pane.

Don't forget the status bar help: When you browse the column set submenu items, it gives a short description of the columns in each set!

Organize the list

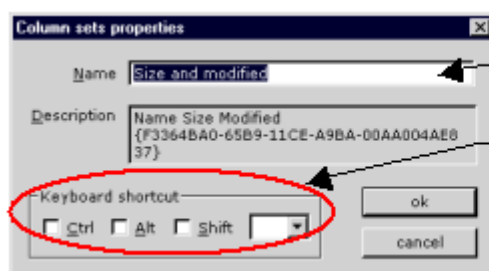
When you select the **Organize...** submenu, the following dialog box pops up. You can use the buttons to add/delete/edit or rename the column layouts.



Buttons to-

- Delete the selected layout
- Edit the selected layout
- Shift the selected layout up
- Shift the selected layout down

When you press the **Properties** button, the following dialog box pops up:



Enter a name that describes the layout

Define a keyboard shortcut for the layout
(optional)

You can edit the properties (including the keyboard shortcut) of the selected column layout.

Customizing user commands

The menu option **Customize | User Command** provides customized buttons and keyboard shortcuts for any user commands such as **windiff**. The mechanics of the process are identical as with other customizable commands. You first add a command, and then you organize them; add a few keyboard shortcuts (as required), etc.



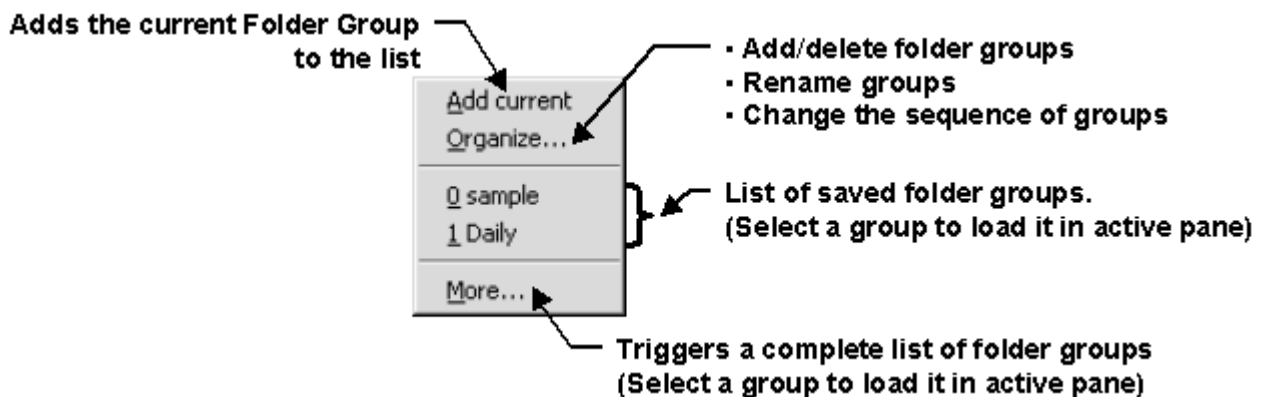
Tip: Keep in mind that you have to specify the command type explicitly, using either “>” (for Windows commands) or “\$” (for DOS commands). Windows commands like “windiff”, “notepad” etc must be started with “>” and DOS commands like “dir” must start with “\$”. If you forget to enter this character at the beginning of a command, x² will assume that it is a DOS command and add a “\$” character for you automatically.

Customizing Folder Groups

You know that each folder pane can display multiple folders at a time (each folder is loaded in a separate folder sheet).

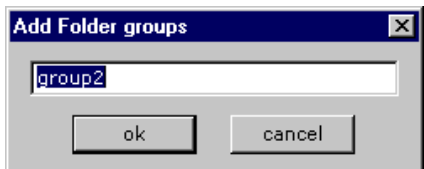
Now assume that you need a particular group of folders often. Each time, you would have to open several folder sheets and load these folders in them. This laborious task is lightened with a powerful set of commands that allow you to remember important folder groups and load any desired folder group instantly.

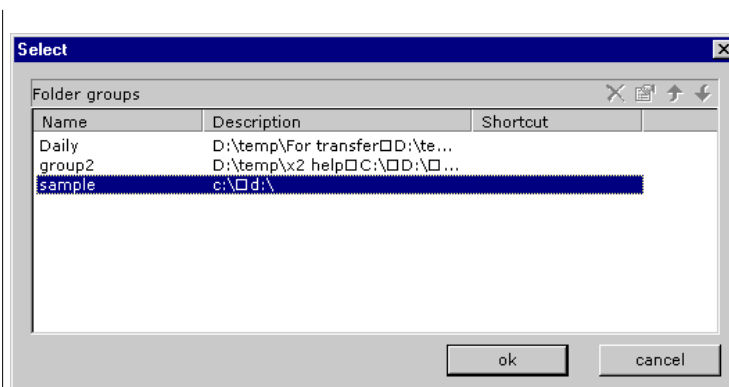
To access these commands, use the **Customize | folder groups** menu option. The following submenu appears:



The options in this submenu are explained below:

Add the current folder group	To add the folder group currently displayed in the active folder pane, select the Customize folder groups Add current menu option. The following window appears:
------------------------------	--

	 <p>The name appearing in the window is only a dummy name: Enter a name that helps you in remembering the purpose of making this folder group. Press OK.</p> <p>Immediately, this group is added to the list of saved folder groups. From now on, you will be able to load this group as shown below:</p>
Load a folder group	<p>Use the Customize folder groups menu option. From the submenu that appears, select the group you want (alternatively, press the number shown against the group). x² immediately launches the required number of folder sheets and loads the folders in them.</p> <ul style="list-style-type: none"> ➤ The existing folder sheets (tabs) are closed before loading the saved folder group. ➤ If a tab's target folder is missing, that tab displays Desktop. (This typically happens when the folder is renamed, deleted or moved to other location. It also happens if a <i>parent</i> folder is renamed, which changes <i>this</i> folder's path.) So, if you see Desktop in any tab, it <i>could</i> mean that a folder is missing. ➤ Even when a tab's target folder is missing, it preserves the target folder's path. This is useful when the folder is only temporarily inaccessible (For example, a folder on LAN can be temporarily inaccessible when the connection is broken). To see the path of such folders, use the Tab Organizer window (described below) <p>The method described above can provide access to a maximum of 100 folder groups, out of which the top ten groups will have a quick-access number listed against them.</p> <p>If you want to select a folder group from a complete list of folder groups, then select the Customize folder groups menu option.</p> <p>A window as shown below pops up:</p>

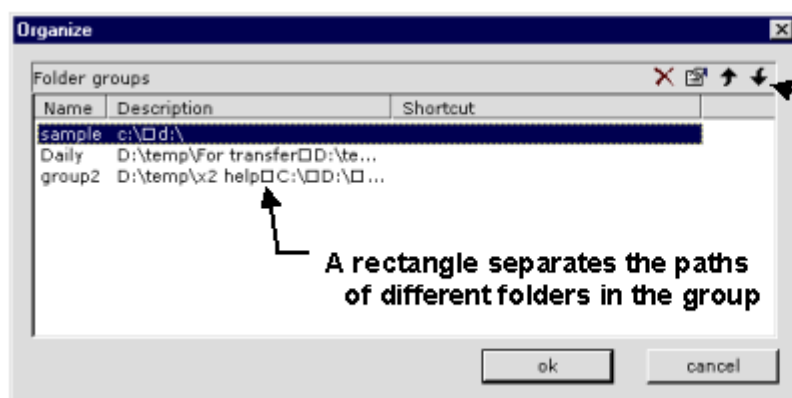


Select the desired folder group from the list.

Organize a folder group


You can rename, delete or reorder the tab groups.

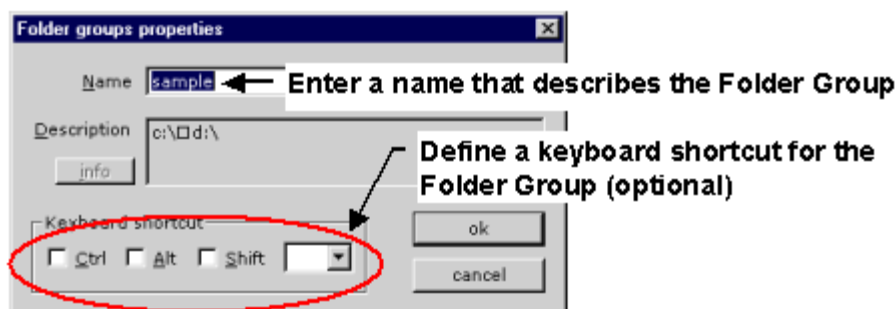
1. Select **Customize | Folder groups | organize** menu option. A **Tab Organizer** window pops up:



Buttons to-

- Delete the selected group
- Edit the selected group
- Shift the selected group up
- Shift the selected group down

2. To edit the properties of any Folder Group, d-click on it or press the  button. A **Folder Group Properties** window pops up:

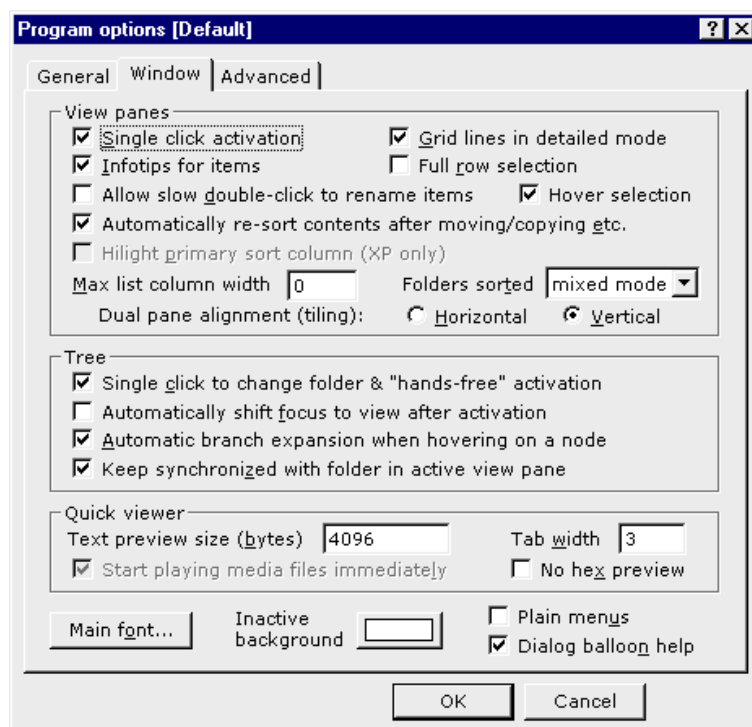
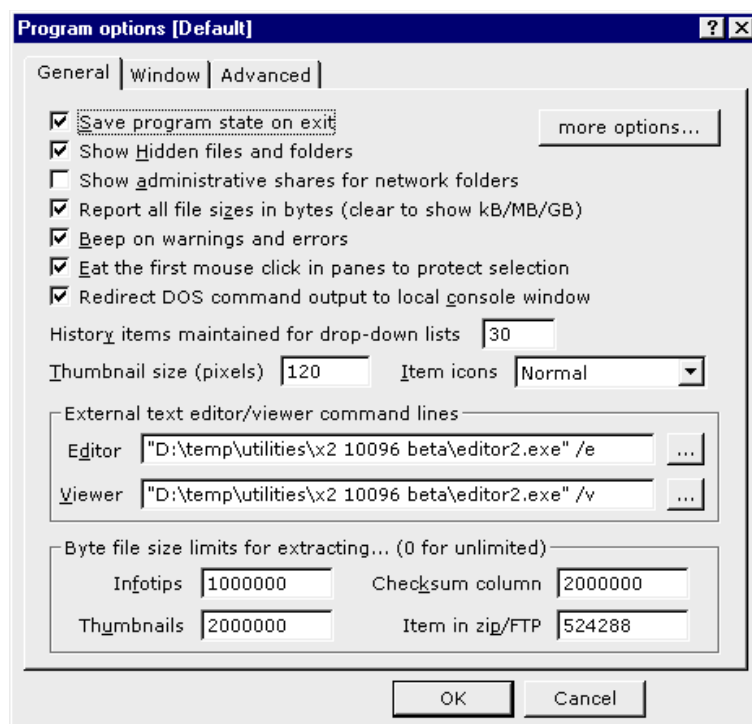


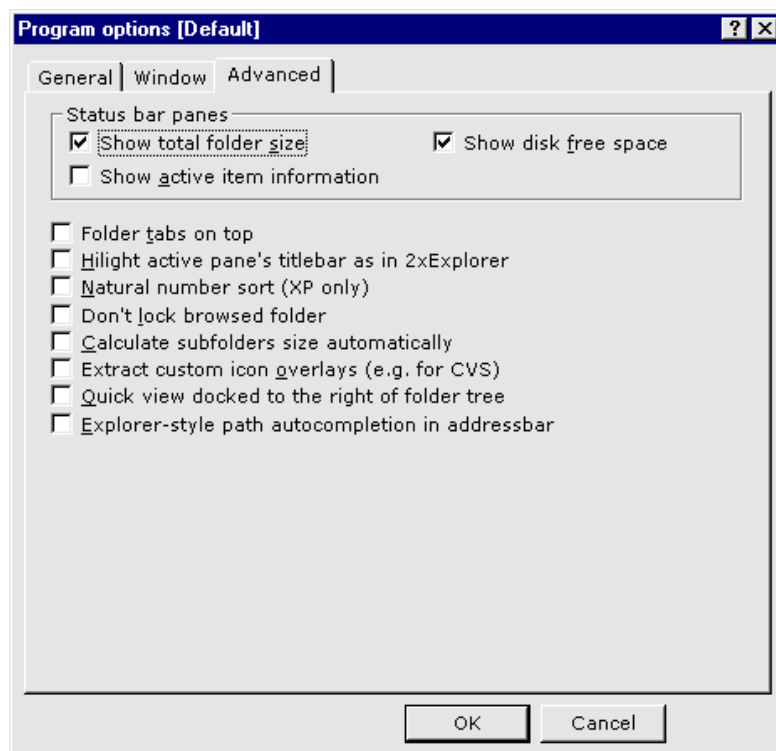
Customizing program options

x² allows you to customize its behavior using the program options menu. Select the **Tools | Options...** menu option. The **Program Options** window pops up. It has three tabs (see the figures below).

The options are explained in **Appendix 9K**. Once set, all options are remembered.

The **More Options...** button in the first tab will point to you the more exotic options settable through registry editing.





Copying the customized settings to other PCs

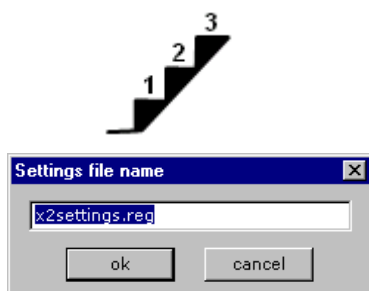
If you have multiple PCs, you do not have to customize x² for each PC separately: You can customize x² only once (on any one of the PCs), and then copy the settings to all other PCs. The PCs need not be connected to each other for this purpose.

The settings are exported to another PC in the form of a .reg file. All you have to do is to transfer the file to the other PC, close x² and d-click on it using Windows Explorer. All the registry settings of the source PC are copied into the target PC. When you restart x², the new settings will be applied to it.

This command copies only the x² settings from the registry. Registry settings for other applications are not touched. It does not alter any part of the registry.

To copy the customized settings to another PC, follow this process:

1. Customize x² to your liking. Take your time to complete all settings exactly as you want them (display style, columns to display, etc)
2. Use the **Actions | Export settings** menu option. A window will pop up, asking you to specify a name for the .reg file. Specify any desired filename, and press **OK**.
3. x² generates the .reg file in the current directory.
 - This is a small text file. You can open the file and edit it using a text editor (such as **Editor²**). If you don't want to copy all settings to the target PC, then you must delete the unwanted parts of the file.
4. Transfer this file to the target PC (using LAN, floppy, etc)



5. In the target PC, repeat step-2 to create a backup of the x² settings of your target PC. Let us name this file **backup.reg**.
 - If something goes wrong (or if you don't like the results), you can restore the original settings using this **backup.reg** file.
6. Close x² in the target PC (you must close any program *before* you change the registry values associated with it; otherwise it won't accept the changed registry values).
7. Start Windows Explorer. Locate the .reg file and d-click on it. All settings of x² in the target PC are changed to match the source PC's settings.
8. Now close Windows Explorer and restart x².

In steps 6 to 8 above, you can use x² in place of Windows Explorer. The alternative steps are as follows:

6. Close all copies of x² (including scrap containers) except one. In this remaining copy of x², unselect the **Tools| options| General| Save program state on exit** checkbox.
7. Locate the .reg file and d-click on it. All settings of x² in the target PC are changed to match the source PC's settings.
8. Now close x² and restart it.



Caution: *The .reg file carries all bookmarks of the source PC. That means the bookmarks from the source PC will overwrite the existing bookmarks on the target PC. Your original bookmarks in the target PCs will be lost!*

To restore the original bookmarks of the target PC, follow this process:

1. Edit the **backup.reg** file using Editor². Delete everything except the bookmarks.
2. Since you still want the **backup.reg** file, you should save the changed file under a different name (say, as **bookmarks.reg**).
3. Close Editor² and switch to x². Locate the **bookmarks.reg** file and d-click on it.
4. Close x² and restart it. The original bookmarks of the target PC will be restored.

8. Productivity tips

To see the entire range of x²'s powerful file-management functions, look at the **Bookmarks** panel on the left (under chapters 5 and 6).

But a powerful file-management tool *by itself* cannot make you productive. This chapter gives you additional tips on how to become more productive at work and at home.

What is “productivity” in the context of file-management?

You use a PC for various purposes at work and at home:

Profession/Hobby	Typical information handled
Student	<ul style="list-style-type: none"> ➤ Articles and essays (ps, pdf and doc files) ➤ Tutorials (pdf and doc files) ➤ Data (Excel or Access files) ➤ Presentations (ppt, pps and pdf files) ➤ Logos, icons, etc.
Office work	<ul style="list-style-type: none"> ➤ Procedures (doc and pdf files) ➤ Articles and tutorials (doc and pdf files) ➤ Data (spreadsheets) ➤ Minutes of meetings (doc files) ➤ Presentations (ppt, pps and pdf files) ➤ Logos, icons, etc.
Home & garden	<ul style="list-style-type: none"> ➤ Recipes ➤ DIY articles on home and gardening
Photography	<ul style="list-style-type: none"> ➤ Articles, e-books and tutorials ➤ Photos (original, corrected) ➤ Video files (original, edited)
Computer art	<ul style="list-style-type: none"> ➤ The images you create ➤ Material you use (logos, icons, fonts, etc.) ➤ Articles, e-books and tutorials
Music	<ul style="list-style-type: none"> ➤ Articles, e-books and tutorials ➤ Musical score sheets ➤ Digital audio (mp3, wma files) ➤ MIDI files
Sports, health, fitness	<ul style="list-style-type: none"> ➤ Articles, e-books and tutorials ➤ Video (MPEG, avi, etc) ➤ Data (e.g. world records, BMI index)

Note: Only a few sample hobbies are listed here, to demonstrate how PCs can be used to support them. Likewise, PCs can support your other hobbies, too.

Normally, you play multiple roles, which means you have to deal with multiple types of information. For example, you may be a student and may be interested in

cooking and photography. Or, you may be a housewife with photography as a hobby. In fact, you may have *all* of these interests (e.g. a professional who is a part-time student, and has multiple hobbies).

Now let us consider your productivity in these areas. Your productivity can be raised if you can handle all this information efficiently *and* maximize its benefit to your activities in each area of interest.

How?

Well, look at the previous table. Pick any row (such as *sports*). Notice that there is a definite relationship between the files you have on this subject and your knowledge on the subject:

Observe that-	What it implies-
None of the file in your collection covers the subject <i>exhaustively</i> : each file contributes some unique information on the subject. Therefore, you need <i>all</i> those files.	You must organize files on each subject in a well-coordinated set, to form your body of knowledge (“ BOK ”).
The original information is too fragmented: You have several files on each subject, but each of these files contains only a limited amount of information on the subject. Your knowledge is actually a compilation of snippets of information culled from these files. But as time passes, you are not sure <i>where</i> you read <i>what</i> about a given issue.	You must have a tracking system that is able to retrieve instantly what you want, given a subject or a topic. You must track which snippet of information comes from which file; so you can refer to the source of your information anytime later, or quote it accurately.
The files eventually get scattered over your PCs and CDs, and it becomes difficult to trace them just when you need them.	Your tracking system must be able to locate the <i>physical</i> location of any desired file; across your PCs and CDs.
Although you know a lot about the subject, your grasp on it may not be complete: If you are asked to talk about it, you may fumble for the right keywords. Your narrative may not be in right sequence or may not be even coherent. If you are asked a question about a finer aspect, you may discover that you don’t really have a clear answer.	If you need to be an expert on any subject, you have to prepare yourself thoroughly by building <i>your own</i> seamless article, presentation and/or FAQ on the subject.
Some of the knowledge you possess is actually <i>inferred</i> from this information. It is in your head: it does not explicitly exist in your PC (or anywhere else). You may not be able to articulate this inferred knowledge, because you have never made an effort to distill what you know. Worse, it becomes hazier as time passes; and the insights you have gained may be lost or get distorted.	You must precisely define what you have learnt/concluded on this subject, so that your learning is not lost (or distorted) over time. As you come across new information, you must update this learning; and keep it ready to be used when needed.

So *these* are your clues about how to become productive in whatever you do!

What about the *printed* books and periodicals you might have on these subjects?

Unless you have a few definitive books on a given subject, it is actually much more difficult to search through your printed collection for a given keyword (when compared with the convenience, thoroughness and speed of the **CTRL+F** command).

Fortunately, you *can* leverage even your printed books and periodicals by creating a catalog of your *printed* collection first. Use a PIM (personal information manager), a spreadsheet (e.g. Microsoft Excel) or a database (e.g. Microsoft Access) to record your books' titles, subjects covered, and keywords. Once you do that, many of the tricks described in this chapter become applicable even to that printed items' collection!

How to achieve higher productivity

Are you extracting the maximum out of your BOK? Does it support your work and hobbies adequately?

Often you will have no idea about your current productivity levels unless you see a better example.

This is easier to understand using our *car* example: Your daily routine in the city does not put great demands on you; and so you might be pretty smug about your car and your driving prowess. You would never think of changing anything. But now think of a situation where a much higher level of performance is expected out of you *and* your vehicle. For example, taking your vehicle on a safari. All of a sudden, your preparedness looks woefully inadequate! And yet, you were reasonably happy with it till yesterday!

So what would you do in this hypothetical case? To meet these new stretched requirements, you would “upgrade” your car *and* your skills:

- Fit some vital accessories to your car (fog lamps, winch, GPS receiver, etc)
- Learn special driving skills: crossing surging rivers, driving over boulders and in sand (or in deep mud), etc.
- Learn how to handle emergencies: first aid, engine repairs, etc.

In much the same way, you might be satisfied with your existing collection of files (and how you are handling them now), but that does not necessarily mean that your productivity is at its peak. It *is* possible to reach new heights of productivity by converting this **collection** into a well-organized **body of knowledge**, and x² is an ideal tool for that.

Just like our *car* example, you will have to add a few accessories to x², and also learn some new file-management skills. This chapter gives you tips on both.

The text is divided in two different sections:

- Using software that complement x² (or extend its functionalities)
- Extracting the most out of x² (by adopting smarter work-habits)



Applications that extend x²'s functionalities

The following applications either complement or extend the functions of x². Some of these applications are for handling specific needs (e.g. handling the EXIF data contained in the digital photos, or MP3 tags information). Depending upon your interests, some of them may not be of use to you.

Note that the following list is based on the experiences of x² users. It does not imply warranties of any kind; either about their own performance or even their integration/performance with x². They are independent software in their own right; and most are listed in freeware host sites such as www.nonags.com. In case of any problems, please contact the author of the concerned application.

Since these programs are available from many host sites, we have not given URLs of any download sites. All you have to do is to use an internet search engine, like [Google](http://www.google.com)!

Note also that the applications listed here are *not* the only ones in their class: there is a stiff competition amongst beautifully crafted applications, and they all keep evolving. For you, it means greater choice: any particular software may not remain your favorite for long. So the purpose of this section is to make you aware of a need, and point to *one* of the best applications that serves this need.

You are most welcome to experiment with other software and even share your experience with other users at the user forum!

Some of these applications are windows shell extensions, and therefore will also extend the functions of the Windows Explorer.

1. Unlocker (for Windows 2000/XP); WhoLockMe

Sometimes, some items cannot be renamed, moved or deleted (either with x² or with Explorer), because they are in use by some other application. The problem is, you don't know which application is locking the item: your task manager (or Windows task bar) does not show any application running.

Such rogue applications can be easily detected and closed with **unlocker** and **WhoLockMe**: In the folder pane of x², r-click on the locked item, and select **Unlocker/WhoLockMe** option from the context menu. A window pops up and shows the rogue application that is locking this item. You are offered an option to unlock this item by closing the application. Then you can rename, delete or move the item.

2. Process Explorer

An advanced version of your **Task Manager**. It can display all processes running on your PC in a tree hierarchy, which is more convenient for a quick assessment. (It also has the conventional process list like the Task Manager).

Process Explorer has an additional panel to show all dlls and files used by the highlighted process: If a file is locked and can't be deleted, you can search which process is locking it.

While the simple interface of **Unlocker/WhoLockMe** is just right for an average user, **Process Explorer** is for the power user who wants to get more out of a process explorer.

3. Totalcopy

Adds the following functions to Windows' traditional file transfer:

- Speed of transfer can be adjusted to avoid congestion
- You can pause and resume the file transfers (for example, to let someone create disk space on his PC by deleting/moving some files)
- Auto-pause on any error: This feature can be used to pause if you run out of disk space, the network goes down, or some other error occurs
- Resuming on power failure: If the computer is turned off during the copy process (e.g. power loss or system crash), you can resume when you restart

4. PowerMenu

Adds the following features to all windows (right-click on the top bar to select from a context menu):

- Stay on top (useful to reduce the window size and keep it on top for file transfers. The window stays on top even if focus is not there.)
- Priority (select from 7 different options)
- Minimize to tray (the window minimizes to system tray. The application's icon will appear there. To restore the window, r-click on that icon and select **restore**.)
- Transparency: you can set the transparency of the window. (Available only in Windows XP/2000.)

5. Ninotech copy path

This application actually extends **ALT+C** and **SHIFT+ALT+C**. R-click on any item to copy its name and path in various formats, as listed below:

Option	What it copies to clipboard
Short Name	File/folder name converted to 8.3 characters
Long Name	File/folder name
Short Folder	Parent folder name converted to 8.3 characters
Long Folder	Parent folder name
Short Path	Full path name converted to 8.3 characters
Long Path	Full path name
Short UNC Path	Full UNC path name converted to 8.3 characters (Only enabled in network environment)
Long UNC Path	Full UNC path name (Only enabled in network environment)
Internet Path	Full UNC path name converted to Internet path (Only enabled in network environment)
Setup...	Create your own copy methods for copying the path names.

6. StrokeIt

Define a mouse *gesture* (=a quick movement of your mouse in a certain shape) and define its equivalent sequence of keystrokes. After this, whenever you execute that mouse gesture, its equivalent keystrokes are input. Thus long sequences of keystrokes can be replaced by simple mouse gestures.

7. ECCO

This PIM (Personal Information Manager) is for the real power user! Although it has little to do with file management, if you are a control freak, this application (along with x²) will meet nearly all your needs!

It has the following *fully integrated* features:

- Diary for appointments
- Phonebook
- A scheduler that can make a phone call to any desired contact person at a predefined time automatically (it automatically takes the phone number from the phone book!)
- *Hierarchical* notes
- *To Do* lists (completed tasks are automatically moved to another list with date stamp)
- Calendar (day/week/month)
- Scheduler with alarm (with “repeat” function)
- Daily journal

8. MP3Ext

This column handler is for the MP3 aficionados.

When you install this program, x² can show all details of MP3 files in regular columns (use the **ALT+K** command to add these columns to your folder pane).

You can use this information in multiple innovative ways:

- **Sort** on any field (artist, genre, album, etc)
- Search for a genre, artist, etc., and play only those songs
- Create and save playlists (in the form of **CIDA** files), etc.

In fact, you can treat x² like a jukebox with powerful search facility!

You can also **search** for any string in these columns. For example, you can search for any genre, artist name, album name, title, track length, etc. (Provided that these details are actually available in your MP3 collection!)

- But use this facility responsibly: respect the copyrights of the original owner. MP3 is the most rampant form of music piracy, and kills the music industry.

9. PixVue

If you are an amateur digital photographer, you will love this one!

Digital cameras embed some important information with each photo. This is called EXIF data (see **Appendix 9M** for details).

When you install this program, x² can show all EXIF data in its columns. (Only on Windows 2000 and XP: additional columns are not supported on

earlier Windows versions).

By default, the EXIF columns are turned off in PixVue. To display the EXIF columns, you have to open the Control Panel, and click on the PixVue's icon. The **Configure PixVue** dialog box pops up. Open the **Shell** tab and put a tick in **EXIF Columns** checkbox.

Searching and **sorting** by EXIF data opens up many possibilities, like-

- If you know even the *approximate* date when the photo was taken, it would be very simple to track down the photo. Example: your spouse's birthday party photos, the trip you took in your last vacation, your daughter's annual school function, etc. Search for the date on which the photo was taken (note that this is *not* the same as the *Created Date* of the JPEG file; and there lies the beauty of EXIF information!)
- Some cameras can capture *bracketed* photos (i.e., multiple photos of the same scene with different EV (*Exposure Value*) settings). You have two different options with such a set: select the best photo from the set, or use a photo editor to merge selective parts of these photos to increase the contrast. To find the bracketed photos, sort on *Photo taken* date (not *Created date*). Photos that were taken together will be shown next to each other. Browse through the photos. Select the sets and transfer them to a scarp pane. Later you can evaluate these sets and decide what to do.
- Search for all your photos that were taken in *portrait* mode, and then flip them by 90 degrees to have the same orientation in your slideshow or printed albums. Also, you can resize these photos for uniform printing. (A few cameras can do this automatically.)
- If you have multiple digital cameras, search for photos taken on a particular camera (for example, you found that the lens of a camera was fogged when you took a fishing trip, and you want to trace all photos taken with that camera after that date.)
- Search for photos where the flash was not fired. These photos are likely to have exposure problems.
- Search for photos that were taken at night or late evening; especially with a subject distance of more than 3 meters. These are likely to have exposure problems too.
- Search for photos that were taken with wide-angle lens setting. These would most probably need correction for perspective.
- Photos taken at night with flash and a close subject distance are likely to have severe redeye problem, which needs touch up.
- Photos taken under colored light will have a noticeable tinge. They need to be corrected.



- **Tip:** **GIMP** (available from www.gimp.org) is an excellent open source freeware tool for correcting photos.

10. THE Rename

This is an extremely powerful mass renamer. It offers you a huge variety of readymade naming options (such as Capitalize only the first word, capitalize all words, etc). You can find and replace a character-string in the filename. Apart from that, it allows you to set your own freeform rules for naming the files. You can also extract information from MP3 tags etc and use this information in naming of files. You can also detect files that have too long names (these get truncated when you cut a CD, so it is a good idea to rename

these files beforehand).



Tip: To change the working folder of THE Rename, simply drag-n-drop an item from x² in the *List* pane of THE Rename.

11. Visual CD

Once your items are moved to CDs, searching for a file/subject becomes tedious: You have to put all CDs in your drive one by one and search them individually. You may accidentally damage your CDs during such frequent handling, and lose your precious data permanently!

Visual CD allows you to browse and search CDs even when they are *not* in your CD drive. It keeps a small “offline” database of your CDs on your hard disk for that purpose.

To generate the database of CDs, you have to let **Visual CD** scan all your CDs once: just put all your CDs one by one in your drive and run this application. **Visual CD** will create a catalogue of all items on each CD. Enter a few additional details (such as the marking on the CD, where it is stored, etc); and your CD database is ready.

You can enter detailed comments against each CD (or even against any folder or file in the CD). Like x²'s own **comments** field (the **ALT+Z** command), this application also allows you to search in this field. However, keep in mind that it does *not* make use of the comments inserted by x²!

Visual CD shows you a master list of all CDs. You can select any CD and browse its contents. You can also define user-defined logical groups (such as *articles*, *utilities*, *photos*, etc.) and then classify the contents of a CD in any of these groups. (**Visual CD** shows you a virtual tree called “Favorites”, which has a node for each of your logical groups.) Later, you can browse the database either CD-wise or logical group-wise.

Visual CD has an explorer-like **GUI**, with a folder tree pane (that shows the files and folders *as they are*), a favorites tree pane (that shows the *logical* groups of the items), a folder pane, and a search pane.

When you browse (or search in-) this database, you feel that *all* the CDs are in the CD drive. When you want to open/run a file, insert the related CD in the drive and d-click in the **Visual CD**. **Visual CD** opens (or runs) the file using its default application.

Thus the amount of handling of CDs is cut down drastically.

You can browse and search files contained *inside* ZIP and RAR files. This is a powerful feature in an offline database, because you don't have to guess the contents of a zip file from its name and size: you can drill right down and see what's inside!

Bear in mind that offline databases cannot search/browse the following:

- Contents of files.
- Many of the “standard” columns
- Additional columns (e.g. EXIF, MP3)
- Comments inserted with x²

Because of this, the search is not as powerful as x²'s search. However, the

advantages of an offline CD database by far outweigh these minor inconveniences.

12. Resplendent Registrar lite

This is a wonderful registry editor. You can search the registry for keys and values; and edit them. You can enter registry values in decimal (rather than Hexadecimal) format.

See **Appendix 9I** to see how x²'s behavior can be changed by editing certain registry keys.

13. Startup Control Panel

Using the **Go To | Special folders | Startup** menu option, you can edit the applications that get launched automatically when you start your PC. However, this is not the only way in which applications are configured to launch at startup.

The **Startup control panel** utility controls even those applications which use the other mechanisms to launch themselves at startup.

14. WinDirStat

This application show you the disk space occupied by different folders in a graphical fashion: the folders are represented by rectangles whose area is proportional to the folder's size. The hierarchy of the directory is shown by nesting these rectangles. (The traditional tree view and list view are also provided.) You can directly delete the unwanted folders to free disk space.

15. TrID

Occasionally, you may find that you cannot open some files because their extension is missing (or wrong). **TrID** is a **DOS-based utility** that identifies file types from their binary signatures. After finding the true identity of a file, you can **apply the correct extension** to it.

TrID uses an XML-based database of definitions, which describe recurring patterns for supported file types. The first 2kB of a file are examined for presence of these patterns. If an exact match is not found, it will give 3-4 near-matches, which you have to check out experimentally.

It can learn new file types very easily: Just run its built-in **TrScan** module on some samples of a new type. It prepares a new signature for this new file type and creates a new XML file. All you have to do is to name this XML file. With that, TrID is ready to detect a new file type!

Use TrID with **/q** switch (to run it in *quiet* mode), otherwise it will flood the screen with status.

16. IFilters

Normally, when you view PDF, CHM, CAB, ZIP, RAR, MHTML and HLP files with **QuickViewer** and **Editor²**, you see a lot of control ("junk") characters, which clutter the display. As a result, you cannot read the contents of the file normally. The Ifilters suppress the control characters from the displayed files, and let you read the text of these files. (Although the text is unformatted, the readability improves a lot.)

Suppression of control characters also allows you to search these files for a

given text string.

The IFilters work on Windows 2000/XP/2003 only.

There are multiple IFilters, each for a different type of file. You can download the required types of IFilters from [Citeknets](#) and [Adobe](#), and install them on your PC.

As soon as these filters are installed, x² will start using them without needing any changes in its settings.

17. Junction Link Magic

This [software](#) lets you create Junction Points (aka *Reparse Points*). (Windows 2000/XP/2003 only).

Typical applications of junction points are:

- To remove clutter.
- To move programs to another place (e.g. move your "Program Files" directory contents to another drive, and linking the original "Program Files" directory to this new location.)
- To map more than 26 drives (Windows allows you to map only 26 drives, because only 26 drive letters (A-Z) are available.)

18. MP3BookHelper

While x² can handle the MP3 files based on their tags, it cannot *edit* those tags. Mp3BookHelper is a feature-rich tag editor. It can convert the file's name and path into several MP3 tags, or construct the filename from these tags. It can edit the tags of several files at a time.

It can act on files collected from different folders (exactly like a [scrap pane](#)). So you can use x²'s excellent search commands and then drag-n-drop the resultant collection into this utility, to edit their tags.

19. IconTweaker

This utility allows you to [customize the icons](#) of files and folders.

How to extract the most from x²

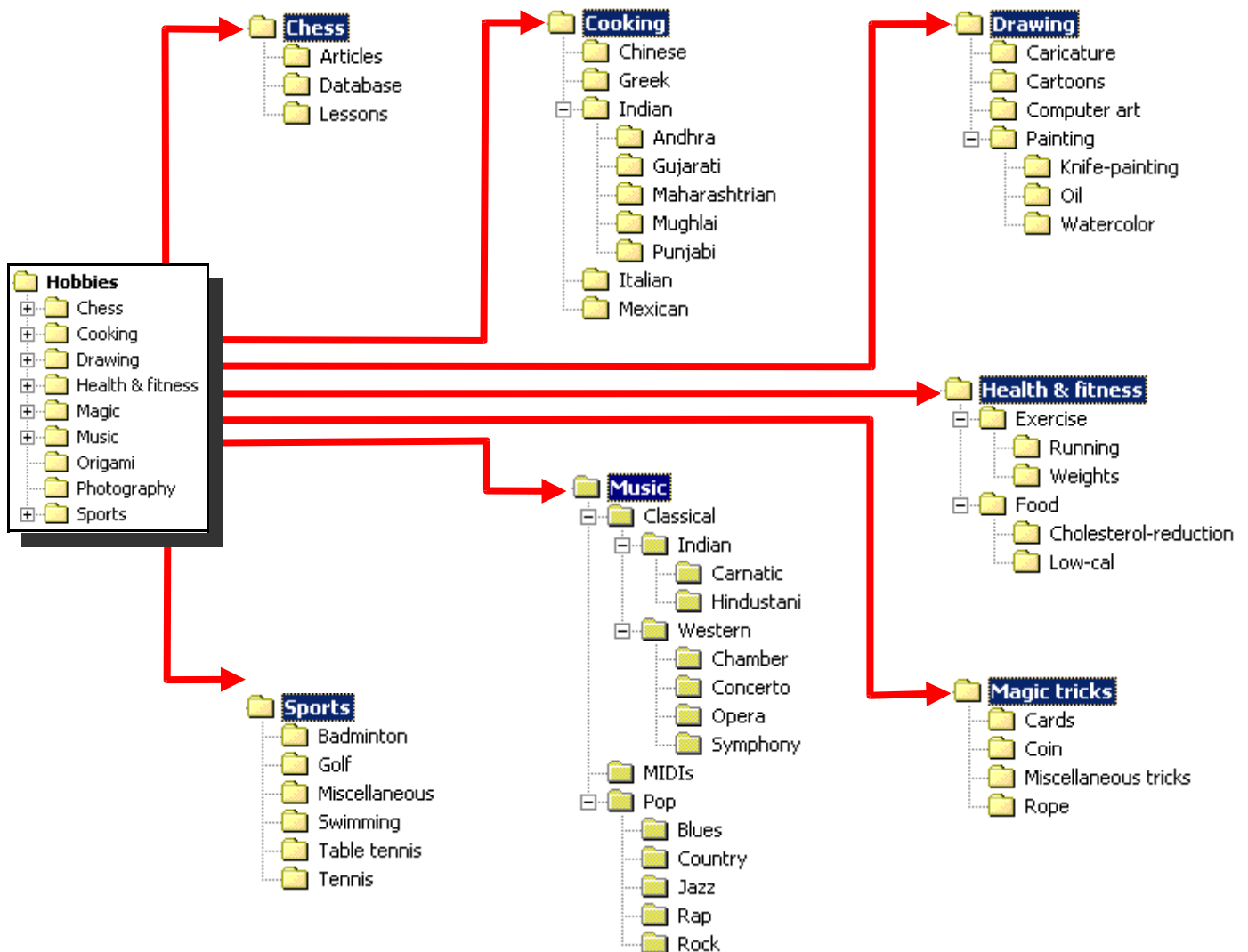
Would you like to drive a Ferrari on a congested city road? Or cut a huge tree with a Swiss Army Knife?

Even the best tool in the world will leave you unsatisfied if you don't use it properly; and x² is no exception. To get the best out of it, you will have to change how you use it!

1. First of all, organize your folder structure!

x² is an extremely powerful file manager. But it can't help you much if your files are stored haphazardly. On the other hand, You can easily retrieve your files if they are grouped according to their themes and subjects. This calls for a well-organized folder structure, as explained below:

- First of all, make a rough list of all subjects in which you have professional or personal interest. Eliminate any overlapping subjects.
- Create a hierarchical tree for each of these subjects: Divide the subject into topics. Divide these topics into subtopics. In this way, go on splitting each subject till each smallest unit is logically distinctly recognizable.
- Create a folder structure to reflect this structure (see the figure below).



**Tips:**

- The success of your file management depends on this *single critical* task. If you don't build the structure correctly, you will have to reorganize it soon. Moving all those files across a multitude of folders is extremely tedious. So, devote ample time to build this structure: Do *not* try to finish it in a hurry.
 - In fact, if you sleep over it for a few days, you will remember a lot of subjects that you had missed earlier!
- There are no “rules” for making the structure. Also, there is no “*uniquely right*” structure: Build the tree to suit your unique needs.

In our example, the topic *Western Music* is arranged in terms of *forms*. Instead, you could have arranged this topic in terms of *Musical Eras* (then the subfolders would be- Avant Garde, Baroque, Neoclassical, Modern, Renaissance, Romantic, Classical, Neoromantic, Middle Ages, etc). And that structure also would be equally “correct”! Further, if you are interested in only certain varieties of music, you may omit the folders for the other varieties.
- When making a directory for a new (or unfamiliar) subject, it is a good idea to add a “miscellaneous” subfolder. This folder serves as a “catch all” for all sundry items. When you cannot decide where to put a particular item, put it in this subfolder. For example, in the **magic tricks** folder, we have subfolders for coin-, rope- and card tricks. We have added a “miscellaneous” subfolder to hold articles on all other types of tricks.

2. Move all your existing files in this structure.

It is advisable to transfer your *entire* data to the new structure.

Despite your best efforts, you will never be able to build a structure that allows you to place each of your files in a unique folder: You will *always* have some files that belong to two or more folders. (For example, suppose you have an e-book titled *Secrets of Healthy Living* that contains health food recipes and also tips on exercise. Clearly, this file belongs to two folders: *Food recipes* and *Exercise*.) In such cases, put the file in the best-fitting folder and place its *hard links* in the other folders.

But if you are going to move this collection to separate CDs, then the hard links will lose their reference. In that case, it would be better to keep a separate copy of the common file in each folder.



Tip: Try to reuse the same folder structure in all your PCs (home, work, and laptop), so **synchronization** is easier: You can use x²'s **copy structure** command.

3. Create a folder to hold temporary files

Often, you make temporary files. After serving a specific task, these are meant to be deleted; and they don't have a lasting value.

You must store these files separately from your permanent files, to avoid a mix up. It is a good idea to create a separate folder to hold such temporary files.

Name this folder appropriately (call it *temp*, *trial*, etc.; or at least include these terms in its name) so that you don't end up moving it into your CDs!

A good place to put this folder is in **My documents** folder or right on your **Desktop**, where you can instantly access it.

4. Define your backup policy

To avoid running out of disk space, you may be regularly cutting CDs of your existing collection. Try to create separate CDs for each major subject. That way, you can label the CD after its subject(s). Proper labeling of CDs is critical for instant retrieval.



Tip: Delay cutting backup CDs till this new structure matures.

Despite your best effort, your first attempt at organizing will not be a total success: initially, you *will* want to reorganize the folder structure often.

If you create backup CDs during this unstable period, those CDs will not have the same structure, and it may be difficult to retrieve data from these CDs. Therefore, it is best to wait till your structure matures and then take CD backups.

To avoid wasting CDs, you can take backups on CD-RWs till the folder structure matures. Cut CD-Rs only when the folder structure is reasonably stable.

5. Periodically review and modify the tree structure.

1. As you discover new subjects, fit them in the existing hierarchy.
2. Sometimes, a given file does not exactly fit in your structure, although there may be plenty of folders that *almost (but not quite)* qualify. Typically, you put that file in the folder for the *nearest* subject. The problem is, next time you will put a similar file in a different folder! This has a long-term disadvantage: you can't find these files easily, as they are scattered around! So, from time to time, you must search the existing folders for these *not-quite-fitting* files, and move them to new folders.
3. Sometimes a collection becomes too large to manage easily. It is better to split such large collection into subtopics.
4. Periodically, check all your "*Miscellaneous*" folders. If they have accumulated a large number of items on a certain topic, create a new folder for that topic.

Tip: In fact, you can search your standard directory for folders named



“*Miscellaneous*“ and save the list in a CIDA file. This list will help you scan all *Miscellaneous* folders at a stroke.

6. Adopt a meaningful naming scheme for your files and folders
 - a. Decide *beforehand* how the names of your files and folders will be composed.
 - b. The *path* should convey the subject and the theme.
 - The *filename* should reflect the contents. Be as specific as possible.
 - Each name can be made from 2-3 building blocks
 Some examples:

Subject	Building blocks
Minutes of a meeting	MOM+Subject + meeting date
Software	Name+Version (or date stamp)
General	Subject + Author

Decide how to separate these building blocks. For example, you can use dots, commas, spaces or hyphens; or simply capitalize the first word of each block (e.g. GIMP v2.0.3.zip, xplorer2UserManual.doc)

- c. Always follow the scheme consistently
 - d. Never use cryptic names: after a few days, you will forget why you named the file like that. Secondly, such names will be meaningless for other persons when you share the files.
 - e. If some files (or folders) have identical names, attach suffixes to distinguish them.
7. Attach **comments** regularly

On a regular basis, devote some time to attach comments to files and folders.

The comments are extremely useful for **searching** and **data-analysis** with the help of spreadsheets like MS Excel. If you *don't* use comments, you will be forced to use lengthy filenames to ensure that the same information stays with the file.

The **comments** field allows you to enter multiple keywords; each serving a different purpose:

- Themes covered; especially for files that cover multiple themes or subjects.
- Level of information: *beginners*, *intermediate* or *advanced*.
- Rating: Develop your own rating scale (e.g. 1=ordinary, 10=best)
- Identify secondary classification of the file; such as author, genre (of music), etc. (The *primary* classification of the file is clear from its path. The secondary classifications can be identified in the comments; so that you don't have to copy the same file in different folders.)

Some people add keywords like “(best)” to the names of their best files. But this is not an elegant solution: You can't add multiple keywords to a filename!

8. Spend time to identify your best files and mark them out

Sometimes, you may have a huge number of files on the same subject, spread all over your hard disks and even CDs. Out of that huge collection, only a few files are actually useful: the rest is just mediocre stuff that is hoarded in the hope that some day it will be useful. (Yes, the “80-20” rule applies everywhere!)

Now suppose you have a job interview or a meeting with a customer; and you have to *urgently* brush up your knowledge on that topic. How will you find the right file to read? At that eleventh hour, can you really afford to search through your hard disks and CDs? Without a clue, you will have to open each and every file to locate that *one* file you need!

Obviously the answer is to mark your best files, so that you can easily locate them when you need them. And the **comments** field is the best place to enter such keywords.

9. Create a special “For reference only” directory

Sometimes, having an organized collection is not enough: you may need to *instantly* access your best articles, to brush up your knowledge on various subjects.

In such cases, consider having a copy of all your best articles in a special “For reference only” directory on your PCs.

- a) To build this directory, go through your collection (on CDs and PCs), and copy the best items into this structure. If you have used a *standard* directory structure everywhere, you will find it easy to locate such material, because all articles for a given subject are kept in a standard, well-known directory path on all PCs and CDs. For example, if you want to see all articles on the subject of “swimming”, you will look in *Sports>Swimming* path.
- b) As time passes, you will come across better (and the latest) articles on any subject. Place a copy of these articles here regularly, and remove the outdated material.
- c) Create this directory on all your PCs, and keep all PCs synchronized, so that later you can access any article *at any time, on any PC*, without fearing that a copy *may* be outdated.

10. Create your own summaries

Creating summary has two distinct benefits:

1. If you need *quick* brushing up on any subject (say, in less than a minute), your “best-of-the-best” collection may be too large for the purpose. On the other hand, summaries are excellent for this purpose.
2. Making a summary on a subject forces you to compose your thoughts in clear terms on that subject. During this exercise, you will find out that many aspects of the subject were either unclear or even totally unknown to you!

How to make a summary on a given subject:

- a) If you have used a standard directory structure in all your PCs and CDs, creating summaries is really easy: Just copy the standard directory structure for keeping these summary files. This makes it very easy to correlate the summary file with the original material.
- b) For making summaries, select a file-type that is best suited to the subject and your summary style (e.g. Excel for tables and formulae; WinWord for text, PowerPoint for animated diagrams and charts, etc).
 - For a given subject, you may need one or more types of files.
- c) In these files, summarize the subject knowledge in your own words.
 - Add charts, diagrams and tables as necessary.
 - Add links to your sources of information (e.g. path of files on PCs and CDs, URLs of websites, etc) so that you don't have to hunt for the original article if you need more details. Keep in mind that putting references to original article lends more authenticity to your article (or presentation). At the same time, you are acknowledging the efforts of the original author; which is a fair practice.

Periodically **find empty folders** in the structure. An empty folder means you have not made a summary for that subject yet. So plan ahead which subject you want to take up next!

Keep your summary updated on daily basis: Whenever you get new material in your collection, make it a point to scan it quickly and see if there is something worthwhile to add to your summary. Update the summary accordingly. *If you put it off "for later", you might never do it!*

To sum up, you should arrange your articles in 3 tiers:

1. The original collection (in your PCs and CDs)
2. The *best-of-the-lot* articles (on all your PCs, synchronized)
3. The summary articles (on all your PCs, synchronized)
 - You should use an identical ("*standard*") directory structure for all 3 tiers; so that you can correlate these three tiers easily.

11. Use your standard directory structure to enhance your knowledge-base

Your "standard directory" represents all subjects of your personal and professional interest. Apart from housing files, the directory has an important use: you can use its structure in *enhancing* your knowledge base.

Here is the method:

- Make a list of all your subjects *using the standard directory structure*
- Think of keywords for each subject
- Find new articles on Internet and LAN using these keywords
- Reorganize your collection using these keywords.

Let us see each step in more details, and also how x² helps us here:

1. Make a list of all subfolders of the standard directory.

Go to the top of your standard directory. Press **CTRL+F**. Ensure that *Search subfolders* checkbox is ticked. Put a tick in the *folders* checkbox;

and deselect the *files* checkbox. Enter a single asterisk (*) in the **Named...** field. Press **OK**.

All the subfolders in your standard directory will be listed in a scrap pane.

Switch over to the scrap pane and **switch the display** to **List** pane style. (That hides all the column details, leaving only the folder names.) Now select all folders by pressing **CTRL+A**. Press **CTRL+P**. (This puts the folder list in clipboard.) Now open a spreadsheet and paste the list. Save this file for future reference. Maintain the list (if you change the structure of the standard directory, you will have to edit this list).

From now on, we will think of this list as the master list of your subjects.

2. Think of keywords for each subject:

At this stage, we only have a plain list of subjects. We have to add keywords to each subject.

Open the spreadsheet, look at the first subject in the list and start adding keywords. If necessary, open the concerned folder in x² and look at filenames. Also, open a few files and browse through them. That should give you an idea about what keywords to use.

3. Add keywords against all subjects in a similar way.

4. Find new articles on Internet

You can use these keywords to search Internet periodically and collect more articles. Sorry- x² does not offer a direct integration with a browser: You will have to enter the keywords *manually* in an Internet search engine like www.google.com.

5. Compose search commands for each subject and save them

Basically, you compose **search commands** for each subject, and save them. Later, you can use these saved searches to find files on any subject in any search domain.

Each search command looks for a subject's keywords in the filename or text. (The logic is: if a file or folder covers a given subject, its name or contents will definitely contain one or more keywords of that subject.)

You have to compose *two* different searches for each subject: one for searching in the names; and the second for searching in the contents. Separate searches are required because *contents of the files* are not column data.

➤ (**Note:** Do not confuse the **Contents** column with *contents of the files*!)

For composing the *search in names* command:

- a) Press **CTRL+F** and clear all previous entries (if any) by pressing the **Clear** button at the bottom.
- b) Enter all the keywords for this subject in the **Named** field. Put an asterisk (*) on each side of each keyword; and then separate these padded keywords with commas. (For example **football, soccer**)

- c) To save the search, enter the subject name in the **Predefined** field and add a suffix “1”. Click on the **Save** button.

For composing the *search in contents* command:

- a) Press **CTRL+F** and clear all previous entries (if any) by pressing the **Clear** button at the bottom.
- b) Enter all the keywords for this subject in the **Containing text...** fields. Separate the keywords with commas. (Asterisks are not required here.) Check that the three checkboxes in this section are selected or unselected as required.
- c) To save the search, enter the subject name in the **Predefined** field and add a suffix “2”. Click on the **Save** button.

With that, you have created and saved a pair of search commands that will search for *all keywords of a subject* in a given search domain. (The suffixes 1 and 2 were deliberately added, so that you can easily identify the pair.)

Think of this pair of search commands as a “*subject search*” command.

Repeat the steps to compose and save search commands for other subjects also.

2. Running a *subject search* command (pair):

To search for a subject, run its pair of subject search commands. This pair will report any file that has any of the keywords in its name *or* in its text.

Run both search commands separately. The results will be collected in two different scrap panes. Now combine the results in a single scrap pane. (Select all results from one pane by pressing **CTRL+A** and drag-n-drop the results to the other scrap pane). If there are any duplicate records in the results, they will be automatically removed.

3. How subject-searches can be used:

Use	Details
Search for new articles in LAN	Periodically search LAN or company servers for your subjects. Select some files out of this search result, and add to your collection.
Reorganize your collection	<p>Periodically, search your own collection, and locate files for various subjects. Move them to their logical folders.</p> <p>This is especially useful if you store your newly acquired files in a general folder before moving them out to their final destinations; or if your mass downloader has a predefined folder to dump all downloaded files.</p> <p>Occasionally, you will also discover that you had placed some files in wrong folders. Your periodic searches will help you in restoring these files to their correct folders.</p> <p>Some files cover multiple subjects. Consider placing copies of such files in all the concerned subject folders; especially if you are planning to cut separate CDs.</p>

Conclusion

This brings us to the end of this user manual. We hope it has provided enough insight on the subject of file-management and how it can boost your personal productivity.

The rest of the manual contains appendices. If some things are difficult to memorize (especially the commands and their keyboard shortcuts), simply take a printout and pin it up as a memory aid.

If you have any additional ideas on any of the topics covered here, please let us know through the user forums. We will incorporate these ideas in the next version of the User Manual.

Here's wishing you a fruitful use of x²!

9. Appendices

9A. Feature comparison table

This table summarizes the main differences between windows explorer, the old 2xExplorer, xplorer² Lite and xplorer² PRO.

Feature	Windows explorer	2x Explorer	xplorer ² lite	xplorer ² pro
All-area shell namespace access	✓	✓	✓	✓
Shell integrated with drag/drop, context menu etc	✓	✓	✓	✓
Automatic sensing of changes in <i>all</i> folders (networked etc)	✓	✗	✓	✓
Multithreaded and multi-window operation	✓	✗	✓	✓
Tree pane	✓	✓	✓	✓
Dual pane mode (browse two folders in one window)	✗	✓	✓	✓
Tabbed interface	✗	✗	✓	✓
Save and restore sets of tabs (folder groups)	✗	✗	✗	✓
Keyboard shortcuts and overall usability	✗	✓	✓	✓
Path autocompletion	✓	✗	✓	✓
Filtering of item visibility (Visual filters)	✗	✓	✓	✓
Filtering on arbitrary criteria (hyperfilters)	✗	✗	✗	✓
Selection engine for precision marking (selection) of files	✗	✓	✓	✓
Selection with arbitrary criteria (hyperfilters)	✗	✗	✗	✓
Extended filesystem information columns (comments etc)	✓	✗	✓	✓
Even more columns (checksum, 8.3 name etc)	✗	✗	✓	✓
Multi-column sort (sort within sort based on columns)	✗	✗	✗	✓
Info Bar (to show additional columns)	✗	✗	✗	✓
Show in groups	✓	✗	✗	✓
Individual folder settings	✗	✗	✗	✓
Custome/skinned system icons	✓	✗	✗	✓
Window layout saving and management	✗	✓	✓	✓
Export folder information as text (for printing etc)	✗	✓	✓	✓
Robust file transfers with powerful options (e.g. filters)	✗	✗	✗	✓
Hard links (NTFS)	✗	✓	✓	✓
Mass renaming	✗	✓	✓	✓
Change file dates (touch)	✗	✗	✓	✓
Find text in files	✗	✓	✓	✓
Search for multiple keywords with Boolean context	✗	✗	✓	✓

Feature	Windows explorer	2x Explorer	xplorer ² lite	xplorer ² pro
Search for text in MS Office and PDF documents using filters	✓	✗	✗	✓
Search for text using Regular Expressions (RegEx)	✗	✗	✗	✓
Customizable Info Bars (separate status bar for each pane)	✗	✗	✗	✓
Unicode & file encoding aware	✗	✗	✓	✓
Unicode and file encoding aware	✓	✗	✗	✓
Splitting and merging of files	✗	✓	✓	✓
Shred (permanent, irretrievable deletion)	✗	✓	✓	✓
Text/RTF/Hex preview	✗	✓	✓	✓
Exact preview of ActiveX documents (MS Office, pdf, etc)	✓	✗	✗	✓
Text editor	✗	✓	✓	✓
Graphics preview	✓	✓	✓	✓
Thumbnail view mode	✓	✗	✓	✓
Multimedia preview (audio and video)	✓	✗	✓	✓
Find files with arbitrary criteria	✗	✗	✗	✓
Search within archives, FTP, webfolders, etc	✗	✗	✗	✓
Refine previous search results (search within a search)	✗	✗	✗	✓
Scrap containers (simultaneous management of many folders)	✗	✗	✗	✓
Folder synchronization	✗	✓	✓	✓
Deep synchronization (including subfolders)	✗	✗	✗	✓
Script wizard for DOS and win32 text commands	✗	✓	✓	✓
Intercept command output in user-friendly console	✗	✗	✗	✓
Customizable user command menu	✗	✗	✗	✓
Detect duplicate files and cleanup	✗	✗	✗	✓
Toolbar customization	✓	✗	✓	✓
Add extra toolbars	✗	✗	✗	✓
Drive Bar for easy access of local/mapped/virtual drives	✗	✓	✗	✓
Detailed breakdown of subfolder disk usage (statistics)	✗	✓	✗	✓
Sample reading speed for folder with 7000 items (sec)	1.05	1.5	0.83	0.83
Program size (kB)	237	596	511	687
Commands in the menu system	48	100	139	193

9B. Using tokens

Instead of typing specific filenames as parts of a command, you can use special characters that get automatically substituted with the name of the item(s) that happen to be selected when a command is executed.

For example, let us take the DOS command **type**, which shows the contents of a file that is used in its argument. We can issue this command in two different ways: **type file1** and **\$type \$N** (assuming that **file1** is the focused item in the active folder pane.) But while the command **\$type file1** can only be used to type only **file1**, its equivalent version with \$N can be used to type *any* file, as long as it is selected in the active view. Thus, using special tokens like \$N saves keystrokes and allows for *reusable* commands.

There are multiple \$-tokens, each representing a different part of the active item. Some tokens represent *an entire selection of items*, taken as a whole.

Let us use a hypothetical situation to clarify the meaning of each \$-token. Suppose we have a dual-pane arrangement where the *right* view is active and the contents are:

- **Left pane:** (inactive) shows the contents of **c:\music** and contains 10 items, out of which only one is selected & active, called **titles.txt**
- **Right pane:** (active) shows the contents of **c:\work\c++** and contains 2 items, *both* selected; the first one is called **file.txt** and the second one **active.cpp**. The focused item — the one with the dotted rectangle around it — is **active.cpp**

The following table lists all the available tokens. The third column shows what each token would have been substituted for, given the above scenario. Unless stated otherwise all tokens act on the single focused (or active) item in each pane.

Token	Description	Example
\$N	Local filename	active.cpp
\$B	Base name (part of the name <i>before</i> the dot)	active
\$E	Filename extension (part of the name <i>after</i> the dot)	cpp
\$P	Parent folder path	c:\work\c++
\$D	File modification date	13/3/2004 10:12
\$C	Parent folder plain name ('C' stands for "container")	c++
\$F	Full path name	c:\work\c++\active.cpp
\$S	All selected filenames	active.cpp file.txt
\$A	All selected filenames (fullpaths)	c:\work\c++\active.cpp c:\work\c++\file.txt
\$L	Left (top) pane path	c:\music
\$R	Right (bottom) pane path	c:\work\c++
\$I	Inactive pane path	c:\music
\$Q	Filename from inactive pane	titles.txt

Token	Description	Example
\$G	Path and filename from inactive pane	c:\music\titles.txt
\$Z	Temporary filename extracted from zipfolder, FTP, etc. Note: Within normal filesystem folders, this token behaves like the \$F token)	%TEMP%\x2TMP_001_active.cpp
\$nn	Automatically incremented counter starting from number <i>nn</i> . If you insert zeros between the \$ and the <i>nn</i> , the resultant numbers are padded with the same number of zeros.	See note-3
\$\$	<i>Escape sequence</i> to represent a single \$ character	\$
,,	<i>Escape sequence</i> for a single comma	,
\$?	Asks for an input from the user. Useful when the user cannot feed all details in advance.	
\$U	UNC path for the current file (in the active pane) for network-wide file access.	\\ComputerName\SharedFolderName\file.txt

(Apart from these tokens, x² also has a special token **\${ColumnName}** where *ColumnName* is any of the columns you see in the **ALT+K** dialog. If you have installed column extenders, you can also use the additional columns for EXIF and MP3. When used in a command, this token is substituted with the *contents* of the concerned column for each of the selected item.

- For example, If you have selected a few MP3 files, you can use the **\${Title}** token in a command, which will insert each MP3 file's title in the command.
- Another example: If you have a collection of articles contributed by multiple authors, you can append each autor's name to each filename by using the token **\${Author}**.

This token is useful for making batch files or/and mass renaming. The curly brackets { } are literals.

Notes:

1. Many of these tokens are intended for renaming large numbers of files, as they are used in **File | Mass rename** command. But you can use them for any other purpose too; just type as many tokens as necessary in a single command and they will all be substituted according to the above rules.
2. You may have noticed that all tokens were listed in uppercase. If you type a token in lowercase then it is interpreted in a slightly different fashion: x² uses the short 8.3 version of whatever name the normal uppercase token would have produced. For example, if \$N produces **undocumented.h** the lowercase \$n would result in **UNDOCU~1.H**, which is the equivalent old DOS filename.
3. When executing commands, you should keep in mind the whereabouts of the **current directory**. If the files you want to act upon are in the active pane, then you can address them with their simple name \$N. To access files in the *inactive* pane or in situations where there is no active folder (e.g. in scrap containers) you should use \$F or \$G; and in general, only use tokens that include path information.

4. The automatic counter's behavior can be changed by putting leading zeros and starting numbers, as shown below:

Token	Sequence	Remarks
\$1	1,2,...,10, ...100	No leading zeros.
\$01	01,02,...,10,...100	Padding with leading zeros continues till 09, after which the numbers have no leading zeros.
\$001	001,002, ...010,..., 099,100	Padding with leading zeros continues till 99, after which the numbers have no leading zeros. In fact, numbers in the range 10~99 have only <i>one</i> leading zero.
\$5	5,6,...,10,...100	Begins with 5; otherwise similar to the \$1 token.

9C. Troubleshooting

Here are the error messages that can appear in x² (listed in alphabetical order, so that you can look up any given error easily):

Error message	Where this happens	What happened? What to do next?
<FileName> Bundle file is corrupted, extraction aborted	Unbundle command	Try bundling your selection again.
<Shift> on its own isn't a valid accelerator modifier. Please use it in combination with <Alt> or/and <Ctrl>	For bookmark lists	Use SHIFT with ALT and/or CTRL .
Accelerators meant for bookmarks shouldn't contain the ALT key	Defining the accelerators for bookmarks	Define a shortcut without the ALT key.
Attempt to move a folder below itself	Robust copy(F5)	You cannot transfer a folder as its own subfolder.
Attempt to overwrite folder with file or vice-versa	Robust copy (F5)	Correct the error and retry.
Cannot access contents of selected item(s)	Editor (F3 or F4)	Item has no contents (e.g. a folder) or it is inaccessible for viewing
Cannot launch editor/viewer; check command lines in Tools Options	Editor (F3 or F4)	Probably registry corruption (did you change anything there?), just close all x ² windows and then delete the relevant registry keys. Restart x ² .
Can't group on this column	Grouping	x ² cannot group on columns such as Name , because there would be too many groups (A-Z), and also some non-English Languages would have nonsensical groups..
Can't paste (or hard link) an item in its original folder	Robust transfer (F5 , F6); Drag-n-drop ; Hard link	You cannot transfer (or hard link) a folder as its own subfolder. Try to create a desired folder structure somewhere else and then replace the folder.
Can't paste a folder within (below) itself	Hard link	You attempted to paste a folder as its own subfolder. Try to create a desired folder structure somewhere else and then replace the folder.
CPU tried its best but this command is ineffable	Commands entered in Address Bar with \$ or >	A windows command cannot be launched; probably the file does not exist or cannot be found in the path.

Error message	Where this happens	What happened? What to do next?
Due to problems during the installation, this program will terminate. Do you want to submit an error report to the authors?	If x ² PRO is used beyond 21 days without registration, or hacked.	Contact the author
Error creating hard link(s); are source & target on the same NTFS partition?	Hard link (CTRL+ALT+H)	You may be attempting to create a hard link on a partition/disk that has FAT formatting.
Error creating target folder	Robust transfer (F5, F6)	Check your access rights for the <i>parent</i> folder.
Error reading and/or corrupt contents file	Load a CIDA file in a scrap container	Get expert help.
Error reading from source	Robust copying (F5)	Get expert help
Error writing contents file	Save a CIDA file	Get expert help.
Error writing to <FileName>	Saving a file with x ² (e.g. CIDA)	Whenever something cannot be saved
Failed to create new browser tab	Creating a tab	Very rare! Try to restart x ² .
File copy failed	Robust copying (F5)	See the error log for more information. Retrying <i>might</i> help.
Folder contents can't be refreshed; try getting out and back in again	Refresh display (CTRL+R)	Check if a floppy disk or CDROM is missing. If this is a remote disk, check with your system administrator or the user of the remote PC!
Folder could not be read in its entirety	Robust copying (F5)	See the error log for more information. Retrying <i>might</i> help.
For one reason or other, the item(s) can't be renamed	Renaming (F2)	The folder does not allow renaming (e.g. zip folder).
I/O Error accessing desktop.ini file	When folder settings are saved	Get expert help
I/O error or user aborted the operation	Splitting a file	You pressed Esc .
I/O error while writing the script file	Script wizard (CTRL+B)	Check the last error
Identifiers cannot be longer than 32 characters	All customize menu commands	User identifiers smaller than 32 characters.

Error message	Where this happens	What happened? What to do next?
Invalid data for rule. Please check dates and sizes are in order	When defining hyperfilter rule	<ul style="list-style-type: none"> The <i>Date</i> rule in hyperfilter is invalid, e.g. the low date is more recent than the high date. You defined the sizes in reverse (low > high).
Licensing subsystem fatal error	When x ² starts	<p>Check these possibilities:</p> <ul style="list-style-type: none"> You do not have administrator privileges for this installation You typed the license key incorrectly? (re-type it; or better, copy the key from the email and paste it in the “Register” dialog). <p>If the problem persists, please contact the author. See the licensing FAQ at the website</p>
List is full; please delete some unused items	The Organize submenu in Customize menu.	Delete some less-needed entries and try again. (Maximum limit is 100 items per list)
New item creation failed	New file (F7) New folder (F8)	You may not have the required rights in this folder/PC; or it could be a read-only medium.
No bundle files in the current selection	Unbundle command	Make sure that there are bundled files in your selection.
No duplicate items found	Duplicate checker	The selection does not contain any duplicates. (Actually this is not an error—Just the result of the DupChecker command that you ran just now).
No information available	Log command	No search information is available for this scrap pane. (This is just a statement--not an error: You may not have used this scrap pane for a search operation.)
No items match the specified filter	Any filtering command	This is not an error really—Just the status of the search command.
No matching items found in the inactive pane	Sync touch command	This is really a status message, not an error.
No matching items in the selection clipboard	Store selection command (F11)	Use the command when it has matching names with the current pane.

Error message	Where this happens	What happened? What to do next?
No sync-matched folders found; have you tried a synchronization command (e.g. F9) first?	Sync-o-paste command	You tried to use the Sync-o-paste command <i>without</i> a previous synchronization command.
Not enough memory for requested operation	Various (most) commands	Close some windows (or upgrade your RAM)
Paste from clipboard failed	Paste command (CTRL+V)	Probably the target folder doesn't accept the contents.
Please enter a number between xxx and yyy	Various commands (e.g. Mark Range)	You entered an out-of-range number: Follow the instructions.
Please use \$ or > to specify command type or type a path to add in list	Command execution in Address Bar	Use the correct prompt
Read error or user interrupt	While x ² is reading a folder	Could be disk error; or you pressed Esc during the read operation.
Reading from <Folder Name> failed miserably	While x ² is reading a folder	Folder read failed e.g. empty floppy
Relative folder structure is ambiguous; paste aborted	Paste scrap clip	Probably you tried to paste a folder in its own subfolder (e.g. paste c: into c:\temp)
Requested path is outside the local namespace root	Any browse command	When a browser is rooted in a subfolder of desktop (using /R command line option), x ² will not allow you to go to unrelated branches.
Secondary streams (e.g. file comments) couldn't be transferred to target	Robust copying (F5)	See the log for more information. Retrying <i>might</i> help.
Selection clipboard is empty	Store selection command (F11)	You tried to use a F11 command variant without first saving a selection.
Some item(s) in the CIDA file could not be located Do you want to see a log?	Load a CIDA file in a scrap container	Did you delete/rename/move some of the target items after closing the CIDA file? See the log and decide whether your list should be amended or you really those items back.
Some items could not be located	Load a CIDA file in a scrap container	The items were moved, renamed or deleted after the CIDA was saved (see log for extra info)
Some items don't support comments (FAT partition?)	Commenting	Check the disk type (in My computer node)

Error message	Where this happens	What happened? What to do next?
Some items were not accessible (insufficient access rights?)	Read folder	You may have blacklisted the item, and therefore x2 may be skipping it. Also, you may not have access rights to some folders in the search domain. Check.
Some link(s) cannot be resolved today	Find target (CTRL+L)	Probably the shortcut target was deleted or moved from its original location
Some of the file attributes couldn't be set	Change attributes	Write-protected, not enough security clearance, etc.
Special paste commands require filesystem source (& target) items	Menu command Edit Paste special	The source or targets are not normal folders (e.g. a zip “folder”)
Target cannot be identical to source name	Robust copying (F5)	Select some other folder as target.
The Clipboard is inaccessible	Paste command (CTRL+V)	Rare—Get expert help
The command template is invalid	Script wizard (CTRL+B)	Check the command template (it could be empty, etc)
The CPU cannot make any sense of the last input	Load a path in Address Bar (or click on a shortcut)	Invalid command. Check syntax. The message also appears if you are trying to load a disk that is corrupted, or the entered path is invalid.
The Description field shouldn't be empty	Organize menu commands	Enter some description. (The actual text would depend on the item: command/bookmark etc)
The file <FileName> is not present in the installation folder	Help menu options (e.g. F1)	Can't find some help/tip file.
The folders involved have incompatible columns	When using “ same filter ” in opposite pane	Columns in filter can't be matched.
The From field shouldn't be empty	Check build command (CTRL+F12)	Specify the “From” rule.
The item(s) cannot be renamed	Renaming (F2)	The folder doesn't accept renames (e.g. a zip folder)
The layout name contains invalid characters or is reserved	Save layout	Names are not supposed to have characters such as spaces. Remove such characters from the name.
The Look in specification is invalid	Search command (CTRL+F)	Check if an the Look in... field contains an invalid string (e.g. a string of commas).

Error message	Where this happens	What happened? What to do next?
The main frame window for this thread is unavailable	When you select an item in a scrap pane and press Enter .	Rare problem. Get expert help.
The Name field shouldn't be empty	Organize dialogs for toolbars, column sets, user commands and folder groups.	Enter a valid name in the Name field.
The name template contains characters that are illegal for files. The rename command will most probably fail; continue anyway?	Mass renaming (F2)	This is an early warning. Check if characters such as * ? etc. are entered; and remove them.
The pasted object contains no folders	Paste folder structure command	You have not copied any folders into the clipboard.
The regular expression syntax is incorrect	Find text commands	Check your RegEx against Appendix 9T of this manual.
The search filter must not be completely unconstrained	Search command (CTRL+F)	You haven't defined anything in the search dialog. This will result in too many hits. Define a condition.
The selection cannot be dragged	Dragging with a mouse	You tried to copy or rename or obtain the properties of an item but this may not be supported, depending on the item and its location (e.g. in virtual folders)
The selection does not support this verb	Various commands in file or edit menus.	You tried to copy or rename or obtain the properties of an item but this may not be supported, depending on the item and its location (e.g. in virtual folders)
The specified filter is invalid	Rule-based visual filter (ALT+H)	You have entered some invalid conditions (e.g. multiple commas)
The target folder does not accept this file operation	Paste command (CTRL+V) (or drag-n-drop)	Check if you have the required access rights in the target folder. Get expert help.
The target folder is invalid	Robust transfer (F5 or F6)	The target folder does not exist any more (e.g. disk is removed; network connection is lost, etc).
The To field shouldn't be empty or contain wildcards or/and dot characters	Check build command (CTRL+F12)	Specify the "To" rule.
There are no items queued for transfer	When you check the queue status using menu Edit Queue Status	The Robust Transfer Queue is empty. (Check if that is a problem really, or your mistaken impression that there ought to be some items there.)

Error message	Where this happens	What happened? What to do next?
There is no active visual filter	Toggle filter (CTRL+J)	The CTRL+J command needs a filter to toggle. But there is no filter defined.
There is no text in the clipboard	Import clipboard command in scrap container	Copy the contents again into the clipboard.
There is not enough room on disk to copy this file. Please insert a new disk to continue	Robust copying (F5)	The target disk does not have enough room. Make room by deleting some items, or change the disk. This message also appears if you intend to transfer a large collection of files to <i>multiple</i> disks. When each disk becomes full, x ² finds that it cannot transfer the next file in the selection, and generates this message. Simply insert the next disk and continue.
There must be at least two tabs to define a group.	Defining a folder group	Add a tab and then define a tab group. If you want to save a single tab, save it as a bookmark.
This column cannot be renamed in place; please put Name column first	ALT+K dialog; Drag-n-drop of columns	You tried to put a non-editable columns (e.g. Size, contents) in the first position. Move the <i>Name</i> column to the left-most position.
This column set is incompatible with the current folder view	When reusing a saved column set	e.g. a column set for filesystem folders with “comments” isn’t relevant in a FTP folder
This command is not applicable for the tree pane	Attempt to run a command while the Tree Pane has focus	The tree pane is not designed to run all commands. Try the same command in the active folder/scrap pane.
This command is only applicable to filesystem folders	ALT+K dialog;	Do not use the command on zip files, My computer, ftp etc.
This command is only applicable to filesystem items	General	You may be trying to use the command on zip files, (e.g. creating file or folder)
This command isn't supported for windows 9x	ADS-related commands (e.g. ADS stream)	
This command requires a shortcut item selected	Find target (CTRL+L)	The command works only on links
This filter is not compatible with this search scope. Some of its rules correspond to a different folder type.	A command that uses hyperfilter (e.g. search)	Use a filter that is compatible. e.g. a column set for filesystem folders with “comments” is not relevant in a FTP folder

Error message	Where this happens	What happened? What to do next?
This folder does not seem to be a valid data source	CTRL+C (or drag)	Can't copy from the specified folder
This identifier already exists, please use another	Lists of toolbars, column sets, user commands and folder groups (in the Customize menus)	Change the name (or if you want the same name, add a suffix)
This is not a valid registration key; keys are ~200 characters long and contain only CAPITAL letters & numbers It will be easier to COPY the key you received by email and then right-click and PASTE it in the box provided	The "Register program" dialog	Error in entering the key. Check if you omitted some characters (especially at the beginning or end)
This item has no preview image	Copy preview	Some items do not have a thumbnail; so do not expect to copy its thumbnail to clipboard.
This operation requires a file object	Commands that act only on files, such as F3 or F4	Do not use the command on a <i>folder</i> .
Too few files selected for merging	Merge files	This command needs at least <i>two</i> files to merge. Folders are ignored. Check your selection again.
Unable to create scrap container	Launch a scrap container	Out of memory. Close some applications and then retry.
Write error while pasting special target	Paste special	Check the last error
Write error, shredding aborted	Shredding	Get expert help.
You must fill in the items you want compared first (e.g. using the Flatten Path command)	Using DupChecker on an empty scrap pane.	Use the DupChecker <i>after</i> loading the scrap pane with some items.
You must leave at least one item in the list	Organize dialogs for toolbars, column sets, user commands and folder groups.	You tried to remove <i>all</i> items from a customized list. Leave at least one.
You must pick a modifier key for the shortcut, e.g. CTRL	Organize dialogs for toolbars, column sets, user commands and folder groups.	The shortcut you chose does not have a "legal" key combination. Change it.

Error message	Where this happens	What happened? What to do next?
You must select at least one column	ALT+K dialog;	The pane must have at least one column! Select any column and add it.
You must specify a name for the filter (to be added or deleted)	Search command (CTRL+F)	Press <i>Save</i> <u>after</u> entering a filter name.
You must specify a starting folder for the search	Search command (CTRL+F)	The “Look in...” field is empty. Either select a folder there, or select from the Special folders pull-down list.
You must specify at least one criterion for comparisons	Using DupChecker	Select one or more criteria and try again.
Your name template has no variability (\$-token). All the files will be renamed using the same target name; continue anyway?	Mass renamer (F2)	If you select “Yes”, x ² will just create the same name and only the last file will remain!

9D. Menus, keyboard shortcuts, toolbar buttons and mouse actions

Functions of x² are available through one or more of the following: menus, keyboard shortcuts, toolbar buttons and mouse actions.

- Most of these commands have menu *and* keyboard shortcut
- A few commands have only menu or a keyboard shortcut (but not both).

Many other windows of x² (e.g. the **ALT+D** window) also have menus, keyboard shortcuts and toolbars. However, since they are not used so frequently, they are not covered in this section.








Users of the Lite version should check the last column in the tables: If you see a **P** symbol against any command in this column, it means that the command is available only in the PRO version.



You can use a printout of this appendix as a lookup table till you remember the shortcuts perfectly.

To read more about the commands, click on the hyperlinks. Note that the hyperlink will take you to the top of related article: the actual command is somewhere farther down. This is intentional: reading the entire section will give you a better idea about the command.






For main screen




Main screen menu: File

Menu Item	Shortcut	Button	Remarks	
Browse	Enter		Browse folder or launch item	
Clone+browse	Ctrl+Enter		Browse the focused item in a new window	
New tab	Ctrl+Ins		Browse the focused item in a new tab (i.e., in a new folder sheet)	
Browse flat	Shift+Enter		Open a new scrap container. Add the contents of the selected folder <i>recursively</i> into the active scrap pane. (Tooltip: <i>Flatten</i>)	P
	Ctrl+Shift+Enter		Add the contents of the selected folder <i>recursively</i> into the active scrap pane. This command reuses the scrap pane that was opened last.	
Send to scrap	Ctrl+S		Place selection in the active pane of scrap container that was selected last (Tooltip: <i>To scrap</i>)	P
View	F3		View file contents as text	
Edit	F4		Edit file contents as text	
Properties	F12		Displays the shell properties of the selected items	
(None)	Alt+Enter		(If the selected <i>single</i> item is a file; or if the selection contains <i>multiple</i> items) Displays the shell properties of the selected files	
			(If the selected <i>single</i> item is a folder) Loads the folder in the opposite folder pane .	
Rename	F2		Rename the selected item in place	


Menu Item	Shortcut	Button	Remarks	
Change type	Ctrl+F2		Edit the name of the selected item and also extension if it is a file.	
Mass rename...	F2		Change selected filenames in bulk, using name templates.	
Delete	Del		Send selected items to the recycle bin.	
Trash	Shift+Del		Permanently delete the selected items (bypassing the recycle bin)	
Close			Close this window (other copies of x ² will keep running)	
Exit	Alt+X		Quit the application (all windows of x ² will be closed)	

Main screen menu: Go To





Menu Item	Shortcut	Button	Remarks	
Up a level	Bksp		Browse one level up from the current folder (go to parent folder) (Tooltip: <i>Parent</i>)	
Back	Alt+Left		Return to the folder browsed before	
Forward	Alt+Right		Advance to the next folder in the list	
Find target	Ctrl+L		Find the target item pointed to by this shortcut file (resolve link)	
Select drive...	Alt+F1		Go to a local disk (Tooltip: <i>Drive</i>)	
(None)	Ctrl+Shift+DriveLetter		Jump to the specified drive's root.	
Recent folder	Alt+F2		Select amongst folders recently browsed in this pane.	
Special folders	Ctrl+Alt+F		Shows a list of special folders (see the entries below for details) (Tooltip: <i>System</i>)	


Menu Item	Shortcut	Button	Remarks	
Special folders >My documents	Ctrl+K		Go to My Document folder	
Special folders >Recent items			Recent files and folders which you have opened using any Windows application	
Special folders >Recycle bin			Go to the recycle bin. Also accessible as a special node in the tree.	
Special folders >Desktop	Ctrl+Bksp		Go to desktop	
Special folders >Root	Shift+Bksp		Root drive of current folder	
Special folders >My computer			Go to My Computer	
Special folders >Network			Go to the root of the connected PCs. Shows all PCs connected in your LAN (Local Area Network).	
Special folders >Control panel			Go to Windows Control Panel .	
Special folders >Printers			Go to all installed printers, including virtual printers that print to ps/pdf files.	
Special folders >Start menu			Go to folder representing the Start button on your desktop.	
Special folders >Startup			Go to the folder that shows programs that start automatically at startup	
Special folders >CD burning			Files waiting to be written to CD (available only in Windows XP)	
Special folders >Send to			Targets appearing in the “send to” shell context menu	
Quick bookmark	Ctrl+F1		Go to the folder bookmarked earlier (Tooltip: <i>Jump</i>)	
Set quick-mark	Ctrl+Shift+F1		Set a bookmark on the current folder.	
Mirror browsing	Ctrl+M		If checked, the panes follow each other as you traverse the folder hierarchy (Tooltip: <i>Mirror</i>)	
Mirror scrolling			Automatically scroll the inactive pane to reveal matching items.	
Same folder	Ctrl+I		Load the current folder in active pane in the inactive pane. (Tooltip: <i>Force</i>)	
	Alt+Ctrl+I		Load the current folder in inactive pane in the active pane.	
Swap panes	Ctrl+U		Mutually exchange the contents of the two panes.	

Main screen menu: Bookmark





Menu Item	Shortcut	Button	Remarks	
Add current			Add current folder to the bookmark list	
Organize			Rename, delete or reorder bookmarks; assign shortcut keys to bookmarks	
<List of user-defined bookmarks>			<ol style="list-style-type: none"> In the menu, each bookmark is displayed with the user-given name. The button is same for all bookmarks. Hover your mouse over a button to see the bookmark name. 	
More...			Select a bookmark from the complete list of bookmarks	
IE Favorites			Go to the folder holding Internet Explorer's favorites	



Main screen menu: Mark

Menu Item	Shortcut	Button	Remarks	
Select All	Ctrl+A		Select all the items	
Unselect all	Alt+A		Unselect all (previously selected) items	
All folders	Ctrl+Alt+Q		Mark all items that are assumed folders (including drives)	
Sticky selection	Alt+S		Toggles sticky selection mode (the selection is unaffected by clicks or pressing of keys) (Tooltip: <i>Sticky</i>)	
Select group...	Gray +		adds asterisks (*) as wildcards on both sides of the string.	
	Alt+Gray+		Same as above, but re-uses the search string entered earlier (there is no dialog box)	
Unselect group...	Gray -		Unselect items that match a filter. It automatically adds asterisks (*) as wildcards on both sides of the string.	
	Alt+Gray-		Same as above, but re-uses the search string entered earlier (there is no dialog box)	
Invert selection	Gray *		Toggles the selection status of each item (selected  unselected)	
Select range...			Select a number of items below the active item	
Total size...			Selects items whose combined size equals the specified size (approximately)	
Synchronize panes	F9		Select items that differ among the panes, using <i>Modified Date</i> information. (Tooltip: <i>Compare</i>)	
Sync wizard...	Ctrl+F9		Synchronize panes using tailor-made options.	
Check build...	Ctrl+F12		Check items according to file-transformation rules	

Menu Item	Shortcut	Button	Remarks	
			(e.g. compilation) (Tooltip: <i>Build</i>)	
Containing text...	Ctrl+G		Select files that contain some specified string (Tooltip: <i>Find text</i>)	
Matching a rule...	Alt+G		Select items whose properties match a specified complex rule	P
Selection > Store	Ctrl+F11		Remember the selected items for later use	
Selection > Select	F11		Select all items stored earlier in the selection clipboard; in addition to the current selection.	
Selection > Unselect	Alt+F11		Unselect all items stored earlier in the selection clipboard	
Selection > Combine	Shft+F11		Items common between the existing and saved selections will be selected.	
(None)	Ctrl+Alt+Gray+		Adds to the selection all files that have the same extension as the currently focused item	
	Ctrl+Alt+Gray-		Removes from the selection all files that have the same extension as the currently focused item	
	Ctrl+Alt+Shift+Gray+		Selects all items of the current group of items	
	Ctrl+Alt+Shift+Gray-		Unselects all items of the entire current group of items	
	Alt+D		Select all (and only-) folders in the pane	
	Alt+Shft+D		Unselect all selected folders	




Main screen menu: Edit







Menu Item	Shortcut	Button	Remarks	
Cut	Ctrl+X		Cut the selection and put it on the Clipboard	
Copy	Ctrl+C		Copy the selection and put it on the Clipboard	
Copy to...	F5		Copy selection to opposite pane or desired location.	
	Ctrl+F5		Copy selection to opposite pane without dialog box	
	Alt+F5		Copy the selection to last target without dialog box	
Move to...	F6		Move selection to opposite pane or desired location.	
	Ctrl+F6		Move selection to opposite pane without dialog box	
	Alt+F6		Move the selection to last target without dialog box	

Menu Item	Shortcut	Button	Remarks	
Queue status			Examine and organize the queued robust transfer tasks. (Tooltip: <i>Queue</i>)	P
Paste	Ctrl+V		Insert Clipboard contents	
Paste Link			Create shortcuts to the items held in clipboard	
Paste special> Hard link	Ctrl+Alt+H		Create hard links for the items held in the clipboard (NTFS only)	
Paste special> Folder structure			Paste this folder with all subfolders, without any files they contain.	
Paste special> Structured scrap clips			Paste items (sourced from a scrap pane) recreating the structure of the original subfolders.	P
Paste special > Multi paste			Pastes the clipboard contents into selected multiple folders	P
Duplicate			Creates a copy of the selected items in the <i>same</i> folder.	
Copy names	Alt+C		Copy the full names of the selected items to the clipboard.	
	Alt+Shft+ C		Copy the names of the selected items in 8.3 format (also called “DOS names”) to the clipboard.	
	Ctrl+Alt+C		Copy the full names of the selected items to the clipboard in <i>comma-separated list</i> format..	
	Ctrl+Alt+Shft+ C		Copy names of the selected items in 8.3 format (“DOS names”) to the clipboard in <i>comma-separated list</i> format.	
Copy preview			Copy the item’s preview image as bitmap.	
Copy columns	Ctrl+P		Copy the selected items’ column text (as it appears in the folder pane) to the clipboard.	
	Ctrl+Alt+P		Copy the selected items’ column text to the clipboard; but only from the column that is used for the primary sorting.	

Main screen menu: View






Menu Item	Shortcut	Button	Remarks	
Dual pane	Ctrl+O		Toggles between single- and dual-pane modes	
(None)	Ctrl+E		Toggles the display between <i>equalize panes</i> and <i>maximize the active pane</i> modes	
Quick viewer	Ctrl+Q		Toggles the Quick Previewer pane On/Off.	
Toolbar> Drive Bar			Toggles the Drive Bar On/Off	

Menu Item	Shortcut	Button	Remarks	
Toolbar> Address Bar			Toggles the Address bar On/Off	
Toolbar> Toolbar			Toggles the toolbar On/Off	
Toolbar> All toolbars			Show or hide (toggle) the container of all toolbars	
Toolbar> Status bar			Toggles the status bar On/Off	
Toolbar> Info Bar			Toggles the detailed information bars (which are attached to both folder panes) On/Off	
Pane style	Ctrl+Alt+V		Displays a list of different styles as shown below (Select any one):	
Pane style > Large icons			Displays items using large icons	
Pane style > Small icons			Displays items using small icons	
Pane style > List			Displays items in a list	
Pane style > Details			Displays detailed information for each item	
Pane style > Thumbnails			Displays thumbnails of each item	
Select columns...	Alt+K		Select which columns are to be displayed in the folder pane; and decide the order of their appearance. (Tooltip: <i>Columns</i>)	
Arrange by			Has the following menu options (select any one):	
Arrange by > Name	Ctrl+Alt+N		Sort by name.	
Arrange by > Size	Ctrl+Alt+S		Sort by size	
Arrange by > Date	Ctrl+Alt+D		Sort by <i>modified</i> date.	
Arrange by > Type	Ctrl+Alt+T		Sort by type (<i>not</i> by extension)	
Arrange by > Other			Sort by a non-standard column.	
Arrange by > Unsorted	Ctrl+Alt+U		Do not sort; show the items in the order they are read from the disk.	
Arrange by > Ascending	Ctrl+Alt+A		Toggles the sort order (ascending/descending)	

Menu Item	Shortcut	Button	Remarks	
(None)	Ctrl+Shift+UpArrow		Move the focused item up in the listing (override the sort order)	
	Ctrl+Shift+DownArrow		Move the focused item down in the listing (override the sort order)	
	Ctrl+Alt+UpArrow		Move the focused group up in the listing (override the sort order)	
	Ctrl+Alt+DownArrow		Move the focused group down in the listing (override the sort order)	
Arrange by > Show in groups			Re-arrange all items in groups.	
Autosize columns (to fit items)	Ctrl+Gray+		Adjust column width to all items	
Autosize columns (to fit headers)	Ctrl+Shift+Gray+		Adjust column width to all headers	
Refresh	Ctrl+R		Refresh the contents of the active pane	
Hold auto-refresh	Ctrl+Alt+R		Temporarily suspend the active folder's auto-refresh feature	
Raw contents			Browse a virtual folder exactly as it is (bypass explorer)	P
Show Tree	Ctrl+T		Toggles the Tree Pane On/Off	
Locate in tree	Alt+T		Locate the browsed folder in the folder hierarchy, in the tree pane . (Tooltip: <i>Tree sync</i>)	
Visual filter > Wildcard	Ctrl+H		Hide the items that do not match the wildcard filter criteria	
Visual filter > Rule-based	Alt+H		Show only those items whose properties match a defined set of complex rules. (Tooltip: <i>Filter</i>)	P
Visual filter > Auto-Filter			Show only the selected file type in the pane, and hide all the other file types. Folders are not affected.	
Visual filter... > On/Off	Ctrl+J		Toggle the wildcard filter or Rule-based filters On/Off.	
Visual filter... > Hide folders	Alt+J		Hide all folders from the active pane (toggle)	
Visual filter... > Selected only	Ctrl+Alt+J		Hide all items that are not selected.	










Menu Item	Shortcut	Button	Remarks	
Visual filter... > Same filter	Ctrl+Alt+M		Force the same visual filter(s) to the inactive pane. (Note: This command applies only the <i>Wildcard</i> and <i>Rule-based</i> filters to the inactive pane. The <i>Hide folders</i> and <i>Selected only</i> filters are not applied with this command.)	
Show all			Cancel all visual filter modes.	

Main screen menu: Actions



Menu Item	Shortcut	Button	Remarks	
New file	F7		Create a new (empty) file (remember to enter an extension)	
New Folder	F8		Create a new folder	
Set comment	Alt + Z		Enter (or edit) comments attached to an item. (Tooltip: <i>Comment</i>)	
ADS			Gives the following 3 options related to ADS (Alternate Data Stream). Select any one:	
ADS View streams			View ADS contents attached to the file	
ADS Bundle to go			Pack all selected files and their ADS contents in a bundle for transferring to a non-NTFS disk	
ADS Unpack bundle			Restore the files and their ADS contents from a bundle	
Change attributes	Shift+F12		Pops up a dialog box to change the item's DOS attribute(s) and created/modified dates (Tooltip: <i>Attributes</i>) (Note: Also see the File Properties... menu option, F12)	
Sync-Touch			Match modification dates of items from active pane to inactive pane.	
Split file			Split the selected file into smaller chunks.	
Merge files			Combine the selected items into a single file (in the order displayed in the pane)	
Shred			Total annihilation of the selected items. Once these items are shredded, they cannot be recovered.	
Save settings now			Immediately saves all the current settings	
Export settings			Save settings as a .reg file. Transfer this file to another PC to replicate all settings there.	
Folder settings>Save			Save all settings for this folder; including pane style, columns and sorting order	P
Folder settings>Clear			Clear all settings for this folder (revert to the default settings)	P

Menu Item	Shortcut	Button	Remarks	
Folder settings>Suspend			Temporarily suspend the custom folder settings for this folder sheet (toggles).	P

Main screen menu: Tools

Menu Item	Shortcut	Button	Remarks	
Run command			Start any Windows (GUI) program	
DOS command	F10		Run a command that requires the DOS interpreter (dir, ren, etc)	
Run History...	Ctrl+F10		Select a command from the history list	
Repeat command	Alt+F10		Quick-repeat of the last command executed	
Command script...	Ctrl+B		Creates a script (batch file), applying a command template on each selected item (Tooltip: <i>Script</i>)	
Find files...	Ctrl+F		Look for files and folders that match a filter	
Check duplicates			Launches an empty scrap container in which you can add items and then search for duplicates.	
Compare subfolders			Compare folders loaded in the opposite folder panes, including their subfolders	
Free space	Ctrl+Alt+Space		Check the free space in the disk(s) being browsed; refresh views if necessary (Tooltip: <i>Space</i>)	
Subfolder size	Ctrl+D		Display size against folders (works only in <i>details</i> style) (The displayed size includes all subfolders) (Tooltip: <i>Measure</i>)	
Folder statistics	Alt+D		Display statistics for this folder and its subfolders (Tooltip: <i>Stats</i>)	P
Options...			Set program options and this window	

Main screen menu: Window

Menu Item	Shortcut	Button	Remarks	
Scrap container			Launch a new scrap container	P
List...	Ctrl+W		List all windows controlled by x ² ; and optionally switch amongst them.	
Close Tab	Ctrl+F4		Closes the active tab (in the active folder pane only)	
Close all tabs	Ctrl+Shift+F4		Closes all tabs except the active tab (in the active folder pane only)	
Clone	Ctrl+N		Open another explorer window like this one	
Save layout			Store the present window layout and its history settings	
Organize...			Delete window layouts or assign shortcut keys	




Menu Item	Shortcut	Button	Remarks	
More layouts			Choose a window from another saved layout	

Main screen menu: Customize

Menu Item	Shortcut	Button	Remarks	
Toolbars>Add new			Add an extra toolbar	P
Toolbars>Organize			Rename or delete additional toolbars (will not affect the default toolbar)	P
Column sets>Add current			Add the current column set to the list	P
Column sets>Organize			Rename, delete or reorder column sets; or assign shortcut keys	P
Column sets>More...			Pick a column set from a complete list	P
User commands>Add new			Add a command template to the user menu	P
User commands>Organize			Rename, delete or reorder user commands; or assign shortcut keys	P
User commands>More...			Pick a user command from a complete list	P
Folder Groups>Add current			Add the current set of tabs to the user menu	P
Folder Groups>Organize			Rename, delete or reorder folder groups (tab groups); or assign shortcut keys	P
Folder Groups>More...			Pick a tab group (folder group) from a complete list	P
Keyboard use			View the assigned and available keyboard shortcuts	P

Main screen menu: Help

Menu Item	Shortcut	Button	Remarks	
Quick start			Shows a small help file in your browser. Launches your browser if necessary. (For more detailed help, press F1.)	
Contents...	F1		Launch the User Manual (<i>this</i> pdf file).	

Menu Item	Shortcut	Button	Remarks	
Tip of the day...			Launch the “Tip of the day” window. The window has a built-in setting to disable its popping up every time you start x ² .	
Register program			Upgrade and/or obtain a license to use the “Pro” version without restrictions	
Check for updates			Launch web browser if required and loads the home page of the x ² website. You have to manually find out if there is an update available there.	
Online support			Get connected to the online customer support center	
Last error			A popup window describes the last error in the current session of x ² and also provides interpretation.	
About xplorer ² ...			Display program information, version number and copyright	

Main screen- Commands outside the menu system

The following commands are required so frequently that it does not make sense to access them through the menus: They are more easily available through keyboard shortcuts or mouse-actions.

Note that a few such commands are included in the menu tables above because they are very closely related to the menu commands. Strictly speaking, they should have been listed here.

Tree pane:

Keyboard Shortcut/ Mouse action	Remarks
UpArrow	Go to the next node displayed above the current node. ➤ It does not affect any collapsed nodes.
DownArrow	Go to the next node displayed below the current node. ➤ It does not affect any collapsed nodes.
LeftArrow	➤ If the current node is expanded or exploded, LeftArrow collapses it. The focus <i>remains</i> on the same node. ➤ If the current node is already collapsed (or does not have any subnodes), then the focus jumps to current node's parent node.
RightArrow	➤ If the current node is collapsed, the RightArrow expands it by one level. The focus <i>remains</i> on the same node. ➤ If the current node is expanded or exploded, RightArrow goes one level down in the first branch.
PageUp	Jump upwards by a screenful
PageDown	Jump downwards by a screenful
Home	Jump to the top of the tree (usually the Desktop node)
End	Jump to the last node of the tree (usually the Recycle Bin node)
Click on a [-]	Close the node (All subnodes disappear)
Click on a [+]	Open the node to show its next-level subnodes
Click on a node	Loads the folder in the active pane
Alt+Click on a node	Loads the folder in the <i>inactive</i> pane
Ctrl+Click on a node	Launches another instance of x ² and loads the folder in the active folder pane.

Quickviewer:

Keyboard Shortcut/ Mouse action	Remarks
Ctrl+C	Copy the selection or image to clipboard
Ctrl+A	Copy all text
Ctrl+F	Search for specified string (text)

Keyboard Shortcut/ Mouse action	Remarks
F3	Find next occurrence of highlighted text
F ₂	Toggles word wrap
Ctrl+UpArrow	Load the next file from the active pane
Ctrl+DownArrow	Load the previous file from the active pane
Alt+Q	Toggle between the <i>Draft</i> and <i>Normal</i> tabs of QuickViewer

Tab Bar

Keyboard Shortcut/ Mouse action	Remarks
<ul style="list-style-type: none"> ➤ D-click on a tab ➤ Click on the x button 	Close tab
D-click in blank area	Open a new tab

Moving within folder pane, selecting (and focusing on-) items

Keyboard Shortcut/ Mouse action	Remarks
Ctrl+Alt+LeftArrow	Switch to the left-side tab
Ctrl+Alt+RightArrow	Switch to the right-side tab
Alt+ UpArrow	Shift focus to previous selected item
Alt+DownArrow	Shift focus to next selected item
UpArrow	Move (scroll) up by one line at a time
DownArrow	Move (scroll) down by one line at a time
PageUp	Jump to the top of currently displayed list of items on the screen (the pane may have a long list that spans several <i>screens</i>)
PageDown	Jump to the bottom of currently displayed list of items on the screen (the pane may have a long list that spans several <i>screens</i>)
Home	Jump to the top of the pane
End	Jump to the bottom of the pane
Ctrl+Alt+UpArrow	Jump to the previous group
Ctrl+Alt+DownArrow	Jump to the next group
Enter any string	Jump to the first item whose name begins with the string (see incremental search)
Shft+Enter any string	Jump to the first file whose extension begins with the string (see incremental search)
Alt+RightArrow	Go forwards in “recently visited folders” list (history navigation chain)

Keyboard Shortcut/ Mouse action	Remarks
Alt+LeftArrow	Go backwards in “recently visited folders” list (history navigation chain)
<ul style="list-style-type: none"> ➤ Click on the item. ➤ Move the cursor to the item with the arrow keys ➤ Press the Space Bar (the selection toggles on/off) ➤ Hover the mouse over the item* 	Select a single item
Draw a lasso around some items	Select multiple adjacent items
<ul style="list-style-type: none"> ➤ Shft+select items with lasso ➤ Shft+Click ➤ Shft+hover the mouse over items* 	Add multiple adjacent items to the existing selection
<ul style="list-style-type: none"> ➤ Ctrl+select items with lasso ➤ Ctrl+Click ➤ Ctrl+hover the mouse over items* 	Add multiple <i>non</i> adjacent items to the existing selection
Insert	Toggle the selection state (select if unselected and vice-versa) of the item under the (focus) cursor and move down
Ctrl + Space	Toggles selection as Ins , but does not move the focus
Space	In sticky selection mode, Space on its own behaves like Ctrl+Space mentioned above

* When the *hover selection* **program option** is selected, a *click* is replaced with a *hover* action.

Movement between various panes

Keyboard Shortcut/ Mouse action	Remarks
Tab	Switch between folder panes
Ctrl+Tab	Jump to Tree pane first, and then toggle between Address Bar and Tree Pane.
Shft+Tab	Jump to Address Bar first, and then toggle the focus between Address Bar and Tree Pane.
Shft+Ctrl+Tab	Depending upon your current focus, toggles focus within a pair of panes: <ul style="list-style-type: none"> ➤ Active Folder pane and QuickViewer, OR ➤ Address Bar and Tree Pane

Other actions







Keyboard Shortcut/ Mouse action	Remarks
Ctrl+F ₃	Use an external viewer instead of Editor ²
Ctrl+F ₄	Use an external editor in place of Editor ²

Keyboard Shortcut/ Mouse action	Remarks
F ₁	Path autocompletion in Address Bar
Shft+Drag toolbar buttons	Shift buttons to new locations (<i>within</i> the toolbar)
Ctrl+Enter	Copy focused filename in Address Bar
Shft+R-click	Get extended context menu for focused file
D-click on blank portion of pane header	Go to the parent folder
D-click in the background area in the pane	Go to the parent folder
Click on a subpath in pane header	Load that folder in the folder pane (go upwards in the folder hierarchy)
Click on column-header	Sort on the column (Click again to reverse the sorting order). ➤ If nested sorting is already in effect, this action resets it.
Shft+Click on column-header	Sort the pane using this column for <i>secondary</i> (nested) sorting (Shft+Click again to reverse the sorting order)


For Scrap Containers

The scrap containers are available only in the PRO version. Hence the following part of the appendix describes features available only in the PRO version.

Scrap Container Menu: File





Menu Item	Shortcut	Button	Remarks
Open	Enter		Opens the selected file (If the selected item is a folder, x ² opens it in a pop-up explorer window)
Browse	Ctrl+Enter		Load the item in the active folder pane.
View	F3		View file contents as text
Edit	F4		Edit file contents as text
Properties	F12		Displays the shell properties of the selected items (Also see Actions Change attributes... menu option) (SHFT+F12)
Rename	F2		Rename the selected item in place
Change type	Ctrl+F2		Edit the name of the selected item and also extension if it is a file.
Mass rename...	F2		Change selected filenames in bulk, using name templates.
Remove	Del		Remove the selected items from this pane (the real items are not affected)
Delete	Ctrl+Del		Send selected items to the recycle bin (Note: The prompt in the message bar shows Del as shortcut. Ignore it.)
Trash	Shft+Ctrl+Del		Delete selection permanently (bypass recycle bin) (Note: The prompt in the message bar shows SHFT+Del as shortcut. Ignore it.)
Close			Close this window (other copies of x ² will keep running)
Exit	Alt+X		Quit the application (all windows of x ² will be closed)


Scrap Container Menu: Mark

Menu Item	Shortcut	Button	Remarks
Select All	Ctrl+A		Select all the items in the active pane
Unselect all	Alt+A		Unselect all (previously selected) items in the active pane
All folders	Ctrl+Alt+Q		Mark all items that are assumed folders (including drives)
Sticky selection	Alt+S		Toggles sticky selection mode (the selection is unaffected by clicks or pressing of keys) (Tooltip: <i>Sticky</i>)
Select group...	Gray +		Select items that match a filter. It automatically adds asterisks (*) as wildcards on both sides of the string.
(None)	Alt+Gray+		Same as above, but re-uses the search string entered earlier (there is no dialog box)


Unselect group...	Gray -		Unselect items that match a filter. It automatically adds asterisks (*) as wildcards on both sides of the string.
(None)	Alt+Gray-		Same as above, but re-uses the search string entered earlier (there is no dialog box)
Invert selection	Gray *		Toggles the selection status of each item (selected \longleftrightarrow unselected)
Select range...			Select a number of items below the active item
Total size...			Selects items whose combined size equals the specified size (approximately)
Synchronize panes	F9		Select items that differ among the panes, using <i>Modified Date</i> information. (Tooltip: <i>Compare</i>)
Sync wizard...	Ctrl+F9		Synchronize panes using tailor-made options.
Containing text...	Ctrl+G		Select files that contain some specified string (Tooltip: <i>Find text</i>)
Matching a rule...	Alt+G		Select items whose properties match a specified complex rule
Selection > Store	Ctrl+F11		Remember the selected items for later use
Selection > Select	F11		Select all items stored earlier in the selection clipboard; in addition to the current selection.
Selection > Unselect	Alt+F11		Unselect all items stored earlier in the selection clipboard
Selection > Combine	Shft+F11		Items common between the existing and saved selections will be selected.
(None)	Ctrl+Alt+ Gray+		Adds to the selection all files that have the same extension as the currently focused item
	Ctrl+Alt+ Gray-		Removes from the selection all files that have the same extension as the currently focused item
	Ctrl+Alt+ Shift+Gray+		Selects all items of the current group of items
	Ctrl+Alt+ Shift+Gray-		Unselects all items of the entire current group of items





Scrap Container Menu: Edit




Menu Item	Shortcut	Button	Remarks
Cut	Ctrl+X		Cut the selection and put it on the Clipboard
Copy	Ctrl+C		Copy the selection and put it on the Clipboard
Copy to...	F5		Copy the selection to another folder
	Ctrl+F5		Copy the selection to the last target
Move to...	F6		Move selection to another folder
	Ctrl+F6		Move the selection to the last target

Menu Item	Shortcut	Button	Remarks
Queue status			Examine and organize the queued robust transfer tasks.
Paste	Ctrl+V		Insert Clipboard contents
Sync-o-paste			Enforce deep-synchronization results, copying selected items to their respective target folder
Multipaste			Pastes the clipboard contents into selected multiple folders
Copy names	Alt+C		Copy the full names of the selected items to the clipboard.
	Alt+Shift+ C		Copy the names of the selected items in 8.3 format (also called “DOS names”) to the clipboard.
	Ctrl+Alt+C		Copy the full names of the selected items to the clipboard, in <i>comma-separated list</i> format.
	Ctrl+Alt+ Shift+C		Copy the names of the selected items in 8.3 format (“DOS names”) to the clipboard, in <i>comma-separated list</i> format.
Copy preview			Copy the item’s preview image as bitmap.
Copy columns	Ctrl+P		Copy the selected items’ column text to the clipboard (as it appears in the folder pane).
	Ctrl+Alt+P		Copy the selected items’ column text to the clipboard; but only from the column that is used for the primary sorting.



Scrap Container Menu: view





Menu Item	Shortcut	Button	Remarks
Dual pane	Ctrl+O		Toggles between single- and dual-pane modes
(None)	Ctrl+E		Toggles the display between <i>equalize panes</i> and <i>maximize the active pane</i> modes
Quick viewer	Ctrl+Q		Toggles the Quick Reviewer pane On/Off.
Toolbar> Address Bar			Toggles the Address bar On/Off
Toolbar> Toolbar			Toggles the toolbar On/Off
Toolbar> All toolbars			Show or hide (toggle) the container of all toolbars
Toolbar> Status bar			Toggles the status bar On/Off
Toolbar> Info Bar			Toggles the detailed information bars (which are attached to both folder panes) On/Off
Pane style	Ctrl+Alt+V		Displays a list of different styles as shown below. Select the style you want.

Menu Item	Shortcut	Button	Remarks
Pane style > Large icons			Displays items using large icons
Pane style > Small icons			Displays items using small icons
Pane style > List			Displays items in a list
Pane style > Details			Displays detailed information for each item
Pane style > Thumbnails			Displays thumbnails of each item
Select columns. ..	Alt+K		Select which columns are to be displayed in the folder pane; and decide the order of their appearance. (Tooltip: <i>Columns</i>)
Arrange by			Displays various sorting options as follows (select any one):
Arrange by > Name	Ctrl+Alt+N		Sort by name.
Arrange by > Size	Ctrl+Alt+S		Sort by size
Arrange by > Date	Ctrl+Alt+D		Sort by <i>modified</i> date.
Arrange by > Type	Ctrl+Alt+T		Sort by type (<i>not</i> by extension)
Arrange by > Path			Sort by path of the <i>parent folder</i> of the items.
Arrange by > Other			Sort by a non-standard column.
Arrange by > Unsorted	Ctrl+Alt+U		Do not sort; show the items in the order they are read from the disk.
Arrange by > Ascending	Ctrl+Alt+A		Toggles the sort order (ascending/descending)
Arrange by > Show in groups			Re-arranges all items in groups.
Autosize columns (to fit items)	CTRL+Gray +		Adjust column width to all items
(None)	Ctrl+Shift+UpArrow		Move the focused item up in the listing (override the sort order)
	Ctrl+Shift+DownArrow		Move the focused item down in the listing (override the sort order)









Menu Item	Shortcut	Button	Remarks
Autosize columns (to fit headers)	Ctrl+Shift+Gray+		Adjust column width to all headers
Refresh	Ctrl+R		Refresh pane contents
refresh	Ctrl+Alt+R		Temporarily suspend the active folder's auto-refresh feature
Visual filter > Wildcard	Ctrl+H		Hide the items that do not match the wildcard filter criteria
Visual filter > Rule-based	Alt+H		Show only those items whose properties match a defined set of complex rules. (Tooltip: <i>Filter</i>)
Visual filter > Auto-Filter			Show only the selected file type in the pane, and hide all the other file types. Folders are not affected.
Visual filter... > On/Off	Ctrl+J		Toggle the wildcard filter or Rule-based filters On/Off.
Visual filter... > Hide folders	Alt+J		Hide all folders from the active pane (toggle)
Visual filter... > Selected only	Ctrl+Alt+J		Hide all items that are not selected.
Visual filter... > Same filter	Ctrl+Alt+M		Force the same visual filter(s) to the inactive pane. (Note: This command applies only the <i>Wildcard</i> and <i>Rule-based</i> filters to the inactive pane. The <i>Hide folders</i> and <i>Selected only</i> filters are not applied with this command.)
Show all			Cancel all visual filter modes.

Scrap Container Menu: Actions

Menu Item	Shortcut	Button	Remarks
Flatten path			Extract the contents of a folder and all its subfolders here. (Note: Ignore the prompt appearing in the status bar-- this command cannot open a CIDA file.) To open a CIDA file, use the Load contents menu option (explained below).
	Alt+Enter		Flattens the selection in the opposite pane
Change attributes			Pops up a dialog box to change the item's DOS attribute(s) and created/modified dates (Tooltip: <i>Attributes</i>)
Set comment	Alt + Z		Enter (or edit) comments attached to an item. (Tooltip: <i>Comment</i>)
ADS			Gives the following 3 options related to ADS (Alternate Data Stream). Select any one:
ADS View streams			View ADS contents attached to the selected file



Menu Item	Shortcut	Button	Remarks
ADS Bundle to go			Pack all selected files and their ADS contents in a bundle for transferring to a non-NTFS disk
Split file			Split the selected file into smaller chunks.
Merge files			Combine the selected items into a single file (in the order displayed in the pane)
Shred			Total annihilation of the selected items. Once these items are shredded, they cannot be recovered.
Load contents			Open a content (CIDA) file saved earlier (Tooltip: <i>Open</i>)
Write contents	Ctrl+S		Save the contents of the current pane into a CIDA file (for later retrieval) (Tooltip: <i>Save</i>)
Recent files <List>			Shows the CIDA files used in the current session (the list gets reset when you close x ²)
Import clipboard			Insert items in scrap pane from the Clipboard (only paths accepted; there must be one path per line—not a comma-separated list.)

Scrap Container Menu: Tools

Menu Item	Shortcut	Button	Remarks
Run command			Start any Windows (GUI) program
DOS command	F10		Run a command that requires the DOS interpreter (dir, ren, etc)
Run History...	Ctrl+F10		Select a command from the history list
Repeat command	Alt+F10		Quick-repeat of the last command executed
Command script...	Ctrl+B		Creates a script (batch file), applying a command template on each selected item (Tooltip: <i>Script</i>)
Subfolder size	Ctrl+D		Display size against folders (works only in <i>details</i> style) (size includes all subfolders) (Tooltip: <i>Measure</i>)
Find target(s)	Ctrl+L		Find target item pointed to by this shortcut file (i.e., resolve this link)
Find files...	Ctrl+F		Look for files and folders that match a filter
Search status...			View the log of an ongoing or a past find files command.
Check duplicates...			Examine contained items for possible duplicates (hides unique items and regroups the duplicates) (Tooltip: <i>Duplicates</i>)
Reveal unique...			Reveal items hidden as a result of a duplicate check
Options...			Set options for the program and this window

Scrap Container Menu: Window



Menu Item	Shortcut	Button	Remarks
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New Scrap Container			Launch a new scrap container
List...	Ctrl+W		List all windows controlled by x ² ; and optionally switch amongst them.
Mirror scrolling	Ctrl+M		Automatically scroll the inactive pane to reveal matching items.

Scrap Container Menu: Customize

Menu Item	Shortcut	Button	Remarks
Toolbars>Add new			Add an extra toolbar
Toolbars>Organize			Rename or delete additional toolbars (will not affect the default toolbar)
Column sets>Add current			Add the current column set to the list
Column sets>Organize			Rename, delete or reorder column sets; or assign shortcut keys
Column sets>More...			Pick a column set from a complete list
User commands>Add new			Add a command template to the user menu
User commands>Organize			Rename, delete or reorder user commands; or assign shortcut keys
User commands>More...			Pick a user command from a complete list
Keyboard use			View the assigned and available keyboard shortcuts

Scrap Container Menu: Help

Menu Item	Shortcut	Button	Remarks
Quick start			Shows a small help file in your browser. Launches your browser if necessary. For more detailed help, press F1.
Contents...	F1		Shows the help file (<i>this</i> pdf file).
Tip of the day...			Launches the “Tip of the day” window. The window has a built-in setting if you don’t want this window to pop up every time you start x ² .
Register program			Upgrade and/or obtain a license to use the “Pro” version without restrictions
Check for updates			Launches web browser if required and loads the home page of the x ² website. You have to manually find out if there is an update available there.
Online support			Get connected to the online customer support center
Last error			A pop window describes the last error in the current session of

			x^2 and also provides interpretation.
About xplorer ² ...			Display program information, version number and copyright

Scrap Container- Commands outside the menu system

The following commands are required so frequently that it does not make sense to access them through the menus: They are more easily available through keyboard shortcuts or mouse-actions.

Note that a few such commands are included in the menu tables above because they are very closely related to the menu commands. Strictly speaking, they should have been listed here.

Quickviewer:

Keyboard Shortcut/ Mouse action	Remarks
Ctrl+C	Copy the selection or image to clipboard
Ctrl+A	Copy all text
Ctrl+F	Search for specified string (text)
F ₃	Find next occurrence of highlighted text
F ₂	Toggles word wrap
Ctrl+UpArrow	Load the next file from the active pane
Ctrl+DownArrow	Load the previous file from the active pane
Alt+Q	Toggle between the <i>Draft</i> and <i>Normal</i> tabs of QuickViewer

Moving within a scrap pane, selecting (and focusing on-) items

Keyboard Shortcut/ Mouse action	Remarks
Alt+ UpArrow	Shift focus to previous selected item
Alt+DownArrow	Shift focus to next selected item
UpArrow	Move (scroll) up by one line at a time
DownArrow	Move (scroll) down by one line at a time
PageUp	Jump to the top of currently displayed list of items on the screen (the pane may have a long list that spans several <i>screens</i>)
PageDown	Jump to the bottom of currently displayed list of items on the screen (the pane may have a long list that spans several <i>screens</i>)
Home	Jump to the top of the pane
End	Jump to the bottom of the pane
Ctrl+Alt+UpArrow	Jump to the previous group
Ctrl+Alt+DownArrow	Jump to the next group
Enter any string	Jump to the first item whose name begins with the string (see incremental search)

Keyboard Shortcut/ Mouse action	Remarks
Shift+Enter any string	Jump to the first file whose extension begins with the string (see incremental search)
<ul style="list-style-type: none"> ➤ Click on the item. ➤ Move the cursor to the item with the arrow keys ➤ Press the Space Bar (the selection toggles on/off) ➤ Hover the mouse over the item* 	Select a single item
Draw a lasso around some items	Select multiple adjacent items
<ul style="list-style-type: none"> ➤ Shift+select items with lasso ➤ Shift+Click ➤ Shift+hover the mouse over items* 	Add multiple adjacent items to the existing selection
<ul style="list-style-type: none"> ➤ Ctrl+select items with lasso ➤ Ctrl+Click ➤ Ctrl+hover the mouse over items* 	Add multiple <i>nonadjacent</i> items to the existing selection
Insert	Toggle the selection state (select if unselected and vice-versa) of the item under the (focus) cursor and move down
Ctrl + Space	Toggles selection as Ins , but does not move the focus
Space	In sticky selection mode, Space on its own behaves like Ctrl+Space mentioned above

* When the *hover selection* **program option** is selected, a *click* is replaced with a *hover* action.

Movement between panes of scrap container

Keyboard Shortcut/ Mouse action	Remarks
Tab	Switch between scrap panes
Ctrl+Tab Shift+Tab	Toggle the focus between Address Bar and the <i>active</i> Scrap Pane.
CTRL+Enter	<p>Moves the focus from a scrap container to the last opened folder pane</p> <ul style="list-style-type: none"> ➤ If your initial focus is on a <i>file</i> in the scrap pane, its parent folder is loaded in the active folder pane, and the file is highlighted. The focus shifts from the scrap pane to the active folder pane in x²'s main window. ➤ If your initial focus is on a <i>folder</i> in the scrap pane, this folder itself is loaded in the active folder pane, and the file is highlighted.

Other actions

Keyboard Shortcut/ Mouse action	Remarks
Ctrl+F ₃	Use an external viewer instead of Editor ²
Ctrl+F ₄	Use an external editor in place of Editor ²
F ₁	Path autocompletion in Address Bar
Shft+Drag toolbar buttons	Shift buttons to new locations (<i>within</i> the toolbar)
Shft+R-click	Get extended context menu for focused file
Click on column-header	Sort on the column (Click again to reverse the sorting order). ➤ If <i>nested</i> sorting is already in effect, this action resets it.
Shft+Click on column-header	Sort the pane using this column for <i>secondary</i> (<i>nested</i>) sorting (Shft+Click again to reverse the sorting order)

9E. Columns available in x²

The following table shows the columns as they appear in the **Column Organizer** (see page 307). x² has three different types of columns: Text, number and date. These are handled differently, as explained in **Appendix 9O**.

Column	Remarks	Type
Name	Displays name of the file/folder, with an icon for quick recognition of the item.	Text
Full name	Actual file name. It can contain spaces. (compare that with DOS name, which is truncated to a length of 8 characters, and cannot contain spaces)	Text
Extension	Filename extension (doc, pdf, xls, odt, etc)	Text
Attributes	File Attributes.	Text
Modified	The date on which the item was last modified Note: The modification date of <i>folders</i> (in NTFS only) will tell you the last time some of its <i>immediate</i> contents was modified by copying, creating or renaming. The date will <i>not</i> change if you merely edit an existing file or if you change contents in deep subfolders.	Date
Created	The date on which the item was created Note: The creation date of files can be newer than the last modified date! When you create a new copy of a file, its creation date is updated whereas the modification (last edit) date remains unchanged. You can compare the creation and modification date columns to figure out special situations like these.	Date
Accessed	The date on which the item was last accessed	Date
Type	File type. The terms <i>Type</i> and <i>extension</i> are related, but yet distinct: while <i>extensions</i> are 2-3 character long, <i>types</i> are known after the file's association with a program. So, for the same extension, if you change the file's association, the file type will be changed. For example, a file with " zip " extension can have its type as " Winzip document " or " UltimateZip document ", depending upon which program is associated with it.	Text
Path	Full path of container (folder) ➤ This field is useful in scrap containers, where items from different location could be thrown together. Paths can be used to tell them apart.	Text
Version	Executable program or DLL version	Text
Links	Number of hard links, if any	Number
Checksum	Simple checksum of contents	Number

Column	Remarks	Type
Medium	Data medium information	Text
8.3 Name	DOS 8.3 Name (you get <i>DOS name</i> by truncating the full name to a length of 8 characters; plus the 3-character extension.)	Text
Size	File size	Number
Size on disk	Actual size occupied on disk (including compressed/sparse files). This is usually <i>larger</i> than Size due to the way hard disks are organized. However for <i>compressed</i> files, size on disk will be smaller!	Number
Comment	(If comments are supported) user keywords associated with the file	Text
Contents	(Applies to folders only) Number of files contained in the folder. Use this column to search for empty folders, or for a quick summary of contained files.	Number
Keywords	Keywords entered in the documents' Properties dialog.	Text
Streams	Number of ADS streams associated with each file.	Number
Company	Company that owns the binary file	Text
Description	Module extended information.	Text
Shortcut to	(Applies to *.lnk files only) Shows the target of the link file.	Text

In addition, in Windows XP, the following **EXIF** tags are available as stock columns: *Width*, *Height*, and *Date picture taken*. (These are the most often used columns. To use other EXIF columns in x², install **PixView**.)

Note: A [S] symbol after a column's name indicates that this column is generated within x². Other columns are generated by Windows and used by x². In general, you should use the "stock" columns since they are faster to display.

x² will also show all the columns supported by your windows explorer (from windows 2000 onwards)

Although the **ALT+K** command offers you a lot of columns to select from, you can have even more columns by installing specialized programs. See **chapter 8** for details. (Once you install these programs, the **ALT+K** command of x² will offer you more columns. The programs themselves do not have a separate **GUI**- they work in the background.).

9F. Context menus

In x² screen

Where to right-click	Function	What it does-
Address Bar	Undo	Undo the last operation
	Cut	Cut the string to clipboard
	Copy	Copy the string to clipboard
	Paste	Paste from clipboard
	Delete	Clears the entry from the Address Bar. Does not affect the actual folder represented by the path.
	Select all	Selects the entire path of the current address in the address bar
Column headers	Select columns (Alt + K)	Pops up a dialog box for selecting columns for the folder pane.
Title bar	Go to a recently visited folder	<p>Pops up a list of folders recently browsed in this pane. Select a folder from this list to load it in the pane.</p> <p>If you right-click and release the button, the list stays on screen. Then you can read the locations and select where to go. You can also select the location with a single click: just slide down the list <i>without</i> releasing the right mouse button and then release the right button on your selected location.</p> <p>If you hold SHFT while r-clicking you'll get all the subpaths in a menu, in case some are cropped due to available width restrictions.</p>

Where to right-click	Function	What it does-
Folder panes (r-click on any item or a selection of multiple items; but <i>not</i> in the “background” area)	Open	Opens the item with its default application
	Send to <i>list of applications and folder locations</i>	You can open the item with these “favorite” applications; or copy the item to a listed location (typically, to the floppy drive or the Desktop)
	Cut	Cuts the item/selection to clipboard
	Copy	Copies the item/selection to clipboard
	Create shortcut	Creates a shortcut to the item/selection, and places it in the same folder
	Delete	Sends the item/selection to recycle bin
	Rename	(This option is not available for a selection) Allows you to rename the item
	Properties	See the properties of the item/selection
	< Additional menu options list>	When you install new software, it may add options in the context menu. For example, compressed archiver applications (e.g. Winzip), antivirus (e.g. McAfee), etc.

Where to right-click	Function	What it does-
Folder panes (r-click in the “background” area)	New file	Create a new (empty) file (remember to enter an extension).
	New Folder	Create a new folder
	Paste (Ctrl+V)	Paste from clipboard
	Paste Link	Create shortcuts to the items held in clipboard
	Paste special > Hard link	Create hard links for the items held in the clipboard (NTFS only)
	Paste special > Folder structure	Paste this folder with all subfolders, without any files they contain.
	Paste special > Structured scrap clips	Paste items (sourced from a scrap pane) recreating the structure of the original subfolders.
	Pane style	Gives the following submenu options (select any one):
	Pane style > Large icons	Displays items using large icons
	Pane style > Small icons	Displays items using small icons
	Pane style > List	Displays items in a list
	Pane style > Details	Displays detailed information for each item
	Pane style > Thumbnails	Displays thumbnails of each item
	Arrange by > Name	Sort by name.
	Arrange by > Size	Sort by size
	Arrange by > Date	Sort by <i>modified</i> date.
	Arrange by > Type	Sort by type (not by extension)
	Arrange by > Other	Sort by a non-standard column (i.e., a column not listed above)
	Arrange by > Unsorted	Do not sort; show the items in the order they are read from the disk.
	Arrange by > Ascending	Toggles the sort order (ascending/descending)
	Arrange by > Show in groups	Shows the items in groups (only in Windows XP and later)
	Shell New... > Folder	Launches a new folder.
	Shell New... > Shortcut	Creates a new shortcut. You will have to enter the target file in the dialog box that pops up.
	Shell New... > <Office file types>	Creates a new Microsoft Office file (i.e., a file with extension such as doc, xls, ppt, txt, wav, mpp, zip, etc.)
	Explorer ►	Explorer options

Where to right-click	Function	What it does-
Tabs (in Tab Bar)	Left	Moves the tab to its left, by one position
	Right	Moves the tab to its right, by one position
	Rename	Label the tab temporarily
Info Bars	Select columns	Lets you select the columns displayed in the Info bar.
	Autosize columns	Adjusts the column width to the information currently displayed in the Info Bar.

In scrap panes:

Where	Function	What it does-
Address bar	Undo	Undo the last operation
	Cut	Cut to clipboard
	Copy	Copy to clipboard
	Paste	Paste from clipboard
	Select all	Selects the entire path of the current address in the address bar
Scrap pane area	Open (Enter)	Open the selected item
	Browse (CTRL+Enter)	Load the item in the active folder pane.
	Copy (CTRL+C)	Copy the selection and put it on the Clipboard
	Paste (CTRL+V)	Paste from clipboard
	Remove (Del)	Remove the selected items from this pane (the real items are not affected)
	Pane style	Displays the following submenu options (select any one):
	Pane style > Large icons	Displays items using large icons
	Pane style > Small icons	Displays items using small icons
	Pane style > List	Displays items in a list
	Pane style > Details	Displays detailed information for each item
	Pane style > Thumbnails	Displays thumbnails of each item
	Arrange by > Name	Sort by name.
	Arrange by > Size	Sort by size
	Arrange by > Date	Sort by <i>modified</i> date.
	Arrange by > Type	Sort by type (<i>not</i> by extension)
	Arrange by > Other	Sort by a non-standard column (i.e., a column not listed above)
	Arrange by > Unsorted	Do not sort; show the items in the order they are read from the disk.
	Arrange by > Ascending	Toggles the sort order (ascending/descending)

In QuickViewer (Draft Preview Tab):

Function	What it does-
Copy	Copies the highlighted text or graphic into clipboard
Select All	Selects all text
Search	Search for a given string
Find Next	Search for next occurrence of the string
Word Wrap	Toggles the text-wrapping On/Off

Function	What it does-
Set font...	Set the font of the display
Encoding	<p>Select the encoding (Options: Windows, OEM, UTF-8, Unicode). Useful for text files that don't have a Byte Order Mask (BOM).</p> <p>For example, if some file appears in hex and you know it is text, it is probably Unicode without a BOM. In such a case, you should be able to view it properly by forcing Unicode encoding.</p>
Text only	Locks the QV in text mode (without graphics or sounds). Useful for viewing raw HTML contents or binary data of graphics
Next	Load the next file in the active pane. You can click in the QuickViewer and press CTRL+DownArrow to quickly load the next file.
Previous	Load the previous file in the active pane. You can click in the QuickViewer and press CTRL+UpArrow to quickly load the previous file.

Notes:

1. The **Draft Preview** tab of QuickViewer shows only first **nnnn** bytes at the beginning of the file. So, all options here will work within these first **nnnn** bytes. They will ***not*** work in the entire file.

You can change the value of **nnnn** by using the **Tools | Options...** menu option. Open the **Window** tab and enter the new size in the **Text preview size (bytes)** field..

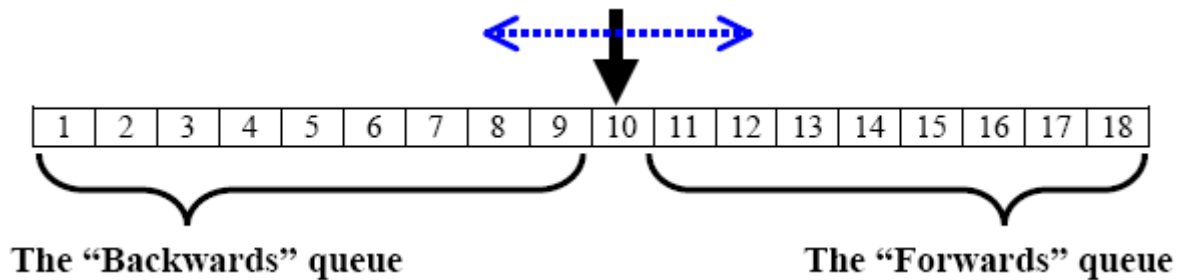
2. The **Normal** tab of the QuickViewer has document-specific context menu. For example, while displaying a Microsoft Word document, it will have a context menu from Word.

9G. History navigation chain

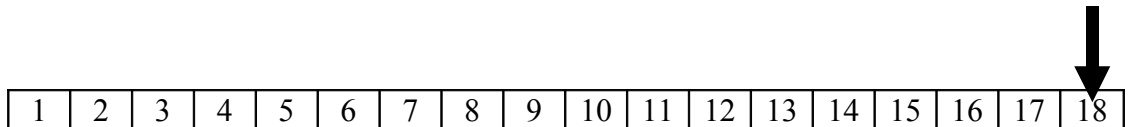
The chain has all locations visited in the past. More recently visited locations are on the right.

<<Past										Recent>>								
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	

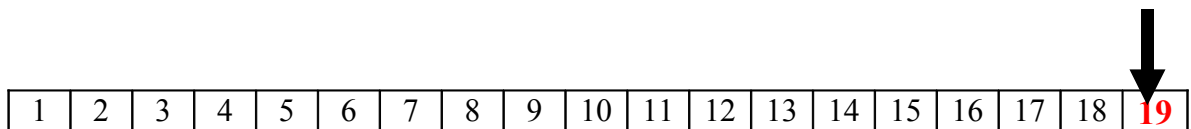
This can be compared to a rosary (or a stack with a movable “current location” pointer). When the user goes up/down the stack, the order of the locations does not change (only the current location pointer shifts as shown with the blue dotted line, below.) Note that the *current* location is neither in the “Forwards” queue nor in the “Backwards” queue.



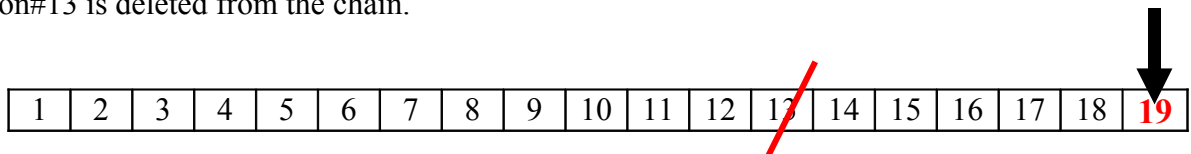
Normally, the location pointer is at the end of the chain (I.e., at the *most recent* location).



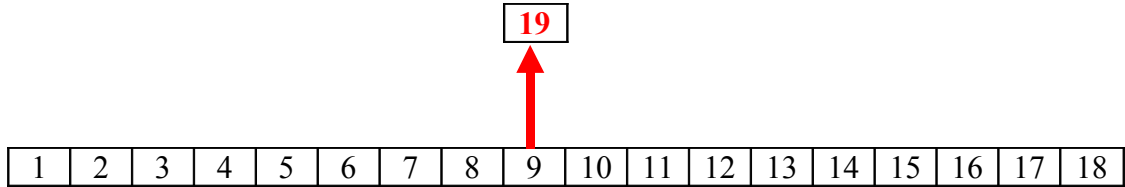
So, if the user clicks on any new folder, it will get added to the end of the chain, and the pointer will shift to the new end of the now-extended chain, as shown below:



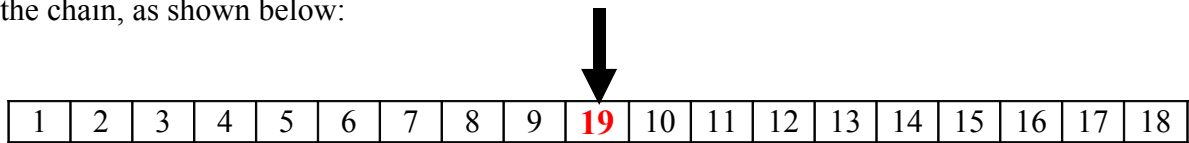
The chain always has a unique list of locations: all duplicate locations are removed. While removing duplicates, x² always retains the *most recent* copy of the location. For example, if the user visits the same folder that is registered in location 13, then this folder is re-registered as location#19, and the location#13 is deleted from the chain.



If the user is somewhere at the middle of the chain, and if he jumps to a new location, the new location is inserted in the chain. Again, duplicate locations (if any) are removed. For example, see the following figure: the navigation chain has 18 locations. The user is currently at location#9, and he jumps to a new location that is not listed in the chain (say, location # 19).



Immediately, the chain gets modified to include the location # 19 on the *right-hand side* of the location #9 in the chain, as shown below:

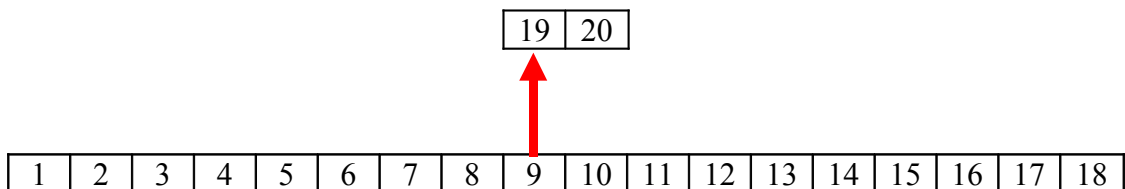


Note the following:

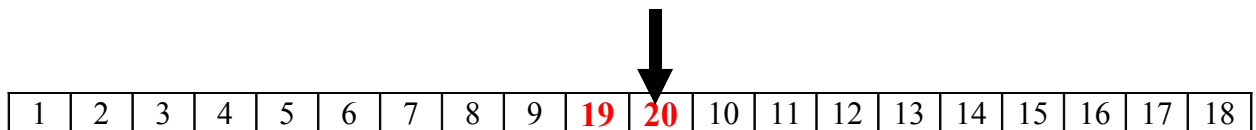
- The location is #19 is the current location now.
- When the user goes backwards, he will see location # 9 (from which he jumped to location # 19)

From this point onwards, when the user goes up/down the chain, he will see this extra location.

In case the user visits *multiple* locations in quick succession, all of them get added to the chain in the same sequence. (Duplicate locations will be removed.) For example, the user goes from Location 9 to two new locations 19 and 20, like this:



As a result, the history chain gets modified as follows:



9H. Search modes in x²

x² can search the domain in two different modes: *depth-first* and *width-first*. The following figures explain how the same tree is scanned differently in these two modes:

Depth-first mode

In this mode, x² scans the folders in alphanumerically *descending* order, and it prefers scanning subfolders before scanning peer folders.

Tree	Scanning sequence	Explanation
	Trial	x ² checks whether the Trial folder has any subfolders (it has). Then x ² jumps to the last subfolder (i.e., folder 5)
	Trial\5	
	Trial\5\53	In folder 5, x ² checks for subfolders and jumps to the last subfolder (53).
	Trial\5\53\535	In folder 53, x ² checks for subfolders and jumps to the last subfolder (535).
	Trial\5\53\534	Since folder 535 does not have subfolders, x ² scans all its peers in descending order. (If they <i>had</i> any subfolders, x ² would have scanned them first.)
	Trial\5\53\533	
	Trial\5\53\532	
	Trial\5\53\531	
	Trial\5\52	After finishing 53 and all its subfolders, x ² scans the next folder in descending order (52). Since folder 52 does not have any subfolders, x ² goes upwards to 51.
	Trial\5\51	
	Trial\5\51\512	In 51, x ² finds subfolder 512, which in turn has subfolders. X ² scans them in descending order (5123 to 5121). After finishing all subfolders of 512, x ² turns to its peer, 511.
	Trial\5\51\512\5123	
	Trial\5\51\512\5122	
	Trial\5\51\512\5121	
	Trial\5\51\511	In 511, x ² finds two subfolders, which it scans in descending order. At this point, x ² has finished all subfolders of folder 5. So it moves on to its peer, folder 4.
	Trial\5\51\511\5112	
	Trial\5\51\511\5111	
	Trial\4	In folder 4, x ² finds two subfolders, so it jumps to the last subfolder (42). There it finds two subfolders and scans them in descending order (422, 421). Since there are no more subfolders, x ² goes to 41, which is a peer of 42.
	Trial\4\42	
	Trial\4\42\422	
	Trial\4\42\421	
	Trial\4\41	In 41, x ² finds subfolders 422 and 411. With that, all subfolders of folder 4 are finished. So, x ² moves to folder 3, which is the peer of folder 4.
	Trial\4\41\412	
	Trial\4\41\411	
	Trial\3	
	Trial\3\32	This cycle is repeated for folders 3, 2 and 1 (and all their subfolders).
	Trial\3\32\322	
	Trial\3\32\321	
	Trial\3\31	
	Trial\2	
	Trial\2\25	
	Trial\2\24	
	Trial\2\23	
	Trial\2\23\232	
	Trial\2\23\231	
	Trial\2\22	
	Trial\2\21	
	Trial\1	
	Trial\1\12	
	Trial\1\11	

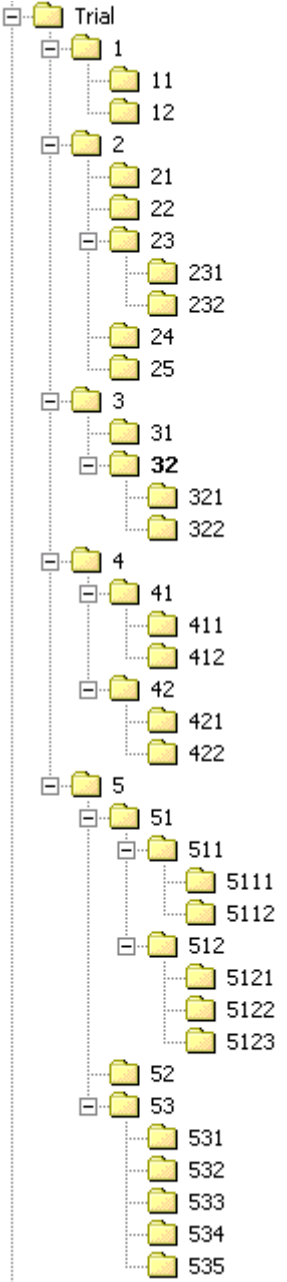
Now suppose you want to search for a file, and it is in folder 12. Although it is at the top of the tree, it is scanned almost at the end! On the other hand, if it were in folder 53, x² would find it

immediately, because a depth-first search begins with the last folder in the domain! Keep this factor in mind while searching.

For faster search results, break up your search domain in smaller groups and specify them as comma-separated list of folders in the **Look in...** field of search box. If you suspect that you will find the search item in a certain folder, specify it first in the list.

Breadth-first mode

In this mode, x^2 scans the directory “layer-by-layer”. (Just imagine that the tree is sliced vertically into strips, and then x^2 scans each strip separately). In each layer, it scans the folders in alphanumerically *ascending* order.

Tree	Scanning sequence	Explanation
	Trial	x^2 scans the top folder (Trial). This is the end of the top layer.
	Trial\1 Trial\2 Trial\3 Trial\4 Trial\5	x^2 finds 5 folders (1,2,...5) in layer-2. x^2 scans them in ascending order.
	Trial\1\11 Trial\1\12 Trial\2\21 Trial\2\22 Trial\2\23 Trial\2\24 Trial\2\25 Trial\3\31 Trial\3\32 Trial\4\41 Trial\4\42 Trial\5\51 Trial\5\52 Trial\5\53	x^2 finds 14 folders in layer-3, and scans them in ascending order. Note that these subfolders belong to different branches of the tree. It means that x^2 has to jump across different branches in order to scan these folders.
	Trial\2\23\231 Trial\2\23\232 Trial\3\32\321 Trial\3\32\322 Trial\4\41\411 Trial\4\41\412 Trial\4\42\421 Trial\4\42\422 Trial\5\51\511 Trial\5\51\512 Trial\5\53\531 Trial\5\53\532 Trial\5\53\533 Trial\5\53\534 Trial\5\53\535	x^2 finds 15 folders in layer-4, and scans them in ascending order. Note that these subfolders belong to different branches of the tree. It means that x^2 has to jump across different branches in order to scan these folders. Also note that folder 1 does not have subfolders at this level, so x^2 skips folder 1.
	Trial\5\51\511\5111 Trial\5\51\511\5112 Trial\5\51\512\5121 Trial\5\51\512\5122 Trial\5\51\512\5123	x^2 finds 5 folders in layer-5, and scans them in ascending order. Note that folders 1, 2, 3 and 4 do not have subfolders at this level, so x^2 skips them.

If your search item is located near the top (not deep down, like folder 5122), then use this mode: you will find it faster as compared to depth-first mode.

Keep in mind that if you use a comma-separated list in the **Look in...** field of search box, x^2 will finish scanning *all* layers of each listed folder before taking up the next folder. So, although the search item is near the top, x^2 may take longer to find it because it is forced to go deeper in previously listed folders. Therefore, it may be faster to specify one area at a time in *width-first* mode; rather than specifying a comma-separated list.

9I. Tweaking the Registry



Warning: *Editing the registry can render your computer unusable. Unless you are 100% certain you know what you are doing, you are advised not to modify it in any way.*

A. How to make x² your default folder application

As part of the installation process, x² adds "open with xplorer2" in the context menu for filesystem folders.

If you want to have this the default action (so that folders always open in x² when you click on them) then make sure this is the default verb, either using **Folder Options** ("file folder" type) or editing the registry:

```
[HKEY_CLASSES_ROOT\Directory\shell]
```

```
@="open_x2"
```

If you want some slightly different command line options, you can add any of the supported options by editing the following registry key:

```
[HKEY_CLASSES_ROOT\Directory\shell\open\command]
```

```
@="C:\Program files\zabkat\xplorer2\xplorer2.exe" /T /1 "%1"
```

Notes:

1. Please check your installation folder first: Your installation path may be different. Secondly, your executable may be called **xplorer2_UC.exe**.
2. Note that "%1" is required (*including* the quotation marks), and is replaced by the folder path you are trying to open.
3. The /T switch causes no tabs to be restored and the /1 switch puts x² in *single pane* mode. (You do not have to use these switches, but they make sense).

B. Tweaking advanced settings for x²

x² has some of its more "exotic" options adjustable via direct registry editing. Its main registry key can be either:

- **HKEY_CURRENT_USER\Software\ZabaraKatranemia Plc\xplorer2**
(for the normal version).
- **HKEY_CURRENT_USER\Software\ZabaraKatranemia Plc\xplorer2_UC**
(For the Unicode version)¹

Whenever you want to change a value, follow these steps:

1. EXIT all running instances of x² (this is essential)
2. Start **Regedit** from the PC's **Start | Run** menu (or equivalent)
3. Locate the main key where x² keeps its settings
4. Double-click on a "variable" name to change its value

¹ You automatically get the unicode version if you install the pro version and you are using a windows platform that supports unicode, i.e. NT4, 2000 or XP

Some quick tips:

- Most options have self-descriptive names: it is easy to imagine what each variable does.
- Names that begin with ‘b’ (e.g. **bUnderline**) refer to *binary* (on/off) type of settings.
 - Setting the value to 0 turns the option off; while any other value enables it.
- Names starting with ‘n’ imply a number, and those with ‘sz’ are strings.
- Names that start with “bin” imply values that are made up as the sum of individual bits. Please sum up all the numbers representing the options you want and set this total number to the “bin” value.
- Values that correspond to time intervals are measured in milliseconds. For example, if you want to set a value to 2 seconds, set it as 2000.
- You can change the default color of some screen elements. See **Appendix 9S** to see how to set colors.

Here’s a description of settings you may want to experiment with, organized by subkey.

Notes:

1. A [*] next to a value below stands for the default setting.
2. Whenever you want to reset a value, just delete it altogether.
3. When changing values, make sure you switch to decimal (not hex) input mode in regedit.

[xplorer2.global] (or [xplorer2_UC.global])

This key contains options that are shared among *all* registry keys, like the user commands you save.

SzAudioExtList	Comma-separated list of extensions for “exotic” audio files, e.g. “foo, bar, wm4”
szVideoExtList	Comma-separated list of extensions for “exotic” video files, e.g. “ogg, bar, wmdd4”
Find Blacklist	Full paths to folders you want excluded from being searched by “Find files” — they won’t be flattened either. You can add extra trouble-making folders as necessary. If you remove any folders, please make sure the remaining list has consecutive folder numbering. The easiest solution is to rename the last folder to the ordinal of the folder you deleted.
Transformation rules	If you want more default rules for Mark Check build , please add them here.

[xplorer2] (or [xplorer2_UC])

This is the main registry key. You can have variants of it in the format *xplorer2.other*, where “other” is the “layout” name you assign from Windows menu. All these registry keys have a similar structure.

Name	Default value	Description
nKBSizeDecimals	1	How many decimals to show for compressed mode sizes, eg 1.01kb vs 1.006kb
bSortZipAsFiles	1	0: as folders (“ <i>As folders</i> ” means that zips are bunched together with other (real) folders.) 1: as files (when zipfolders are supported).
nFocusTimeoutMS	500	Timeout (in milliseconds) affecting the QuickViewer and tree auto-updates. The default is to wait 0.5 sec before e.g loading a file’s preview, giving you time to scroll without loading previews for each file you come across.
nHoverTimeoutMS	1000	The time you have to hover on a tab or tree node while dragging, before x ² automatically opens the tab or tree node.
RgbFolderLinkcol	-1	Color for Highlighting the active subpath in pane titlebars. Most of the time the default blue color is fine
rgbActiveBgcol	-1	Color overriding the white background of active folder panes
rgbFilterBgcol	-1	Color override for folder panes with an active visual filter. Note that this setting applies only to the <i>active</i> pane: the background color of the <i>inactive</i> pane does <u>not</u> change even if a filter is active in it.
nToolFont100	90	Percent increase (e.g. 110) or decrease (e.g. 90) for toolbar font size. For most systems the default 90 is fine. If it turns out too small try a value like 100.
szEditor2Path		Path for Editor ² , the preferred viewer association (automatically set by x ²)
szNewFileExt		Text entered here will be used as extension of the new file created by the Create New file (F7) command; you do not have to enter the dot (.) and the extension. (e.g. Enter txt to create text files by default.)

Name	Default value	Description																		
SzExtFindFiles		Path for external program for finding files [default is Windows Explorer] e.g. c:\tools\finder "%s" The string "%s" (<i>with</i> the double quotation marks) should be included; the current folder path is passed as an argument there (this option is only available for the Lite version)																		
binMiscOptions	0	<table><tr><td colspan="2">This entry controls miscellaneous options for x².</td></tr><tr><td>GLOPT_NOED209 = 1</td><td>Don't use Editor² at all</td></tr><tr><td>GLOPT_ALTAREFRESH = 4</td><td>Back up autorefresh mechanism</td></tr><tr><td>GLOPT_SAVEF5DIRS = 16</td><td>When you select "copy to opposite pane" option in F₅ (and F₆), the paths of the inactive pane will be added to the pull-down list of these dialogs.</td></tr><tr><td>GLOPT_NOBGTHUMBS = 8192</td><td>No background threading for thumbnails, saves custom DLL GPFs</td></tr><tr><td>GLOPT_ROBUSTPASTE = 131072</td><td>Implement the Edit Paste command robustly, not through Windows Explorer</td></tr><tr><td>GLOPT_NOLEFTDND = 4194304</td><td>Disable LEFT drag-drop to avoid move accidents (right-drag still works)</td></tr><tr><td>GLOPT_NOCOLCACHE = 16777216)</td><td>Don't cache column information (for CVS users)</td></tr><tr><td>GLOPT_RENFULLNAME = 33554432</td><td>F₂ selects the entire filename, including the extension</td></tr></table>	This entry controls miscellaneous options for x ² .		GLOPT_NOED209 = 1	Don't use Editor ² at all	GLOPT_ALTAREFRESH = 4	Back up autorefresh mechanism	GLOPT_SAVEF5DIRS = 16	When you select "copy to opposite pane" option in F ₅ (and F ₆), the paths of the inactive pane will be added to the pull-down list of these dialogs.	GLOPT_NOBGTHUMBS = 8192	No background threading for thumbnails, saves custom DLL GPFs	GLOPT_ROBUSTPASTE = 131072	Implement the Edit Paste command robustly, not through Windows Explorer	GLOPT_NOLEFTDND = 4194304	Disable LEFT drag-drop to avoid move accidents (right-drag still works)	GLOPT_NOCOLCACHE = 16777216)	Don't cache column information (for CVS users)	GLOPT_RENFULLNAME = 33554432	F ₂ selects the entire filename, including the extension
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GLOPT_NOCOLCACHE = 16777216)	Don't cache column information (for CVS users)																			
GLOPT_RENFULLNAME = 33554432	F ₂ selects the entire filename, including the extension																			

Name	Default value	Description								
BsantasLittleHelper	1	<div>This controls whether x² uses a background thread to do time-consuming tasks like thumbnail extraction etc.</div> <table><tr><td>0</td><td>Turn it off (not recommended).</td></tr><tr><td>1</td><td>Run at the same priority level as the main program.</td></tr><tr><td>2</td><td>Uses the background thread but running at a lower priority so as not to interfere with the main program. But the columns may take a long time to fill up (especially when other programs are running)</td></tr></table>	0	Turn it off (not recommended).	1	Run at the same priority level as the main program.	2	Uses the background thread but running at a lower priority so as not to interfere with the main program. But the columns may take a long time to fill up (especially when other programs are running)		
0	Turn it off (not recommended).									
1	Run at the same priority level as the main program.									
2	Uses the background thread but running at a lower priority so as not to interfere with the main program. But the columns may take a long time to fill up (especially when other programs are running)									
bSingleWindow	0	<div>Controls whether a new window/tab will be launched when you use the clone command, or launch a new instance of x² (by using the Quick Launch Bar or Window's START menu).</div> <div>There are 3 possible settings, as shown below:</div> <table><tr><th>Value</th><th>Behavior</th></tr><tr><td>0</td><td>(Default). A new window is launched when you clone or launch a new instance of x².</td></tr><tr><td>1</td><td>Only one window is used for all folders, even when you launch/clone a separate instance of x²</td></tr><tr><td>2</td><td>A new tab will be opened</td></tr></table> <div>If this value doesn't exist just create it as a REG_DWORD.</div>	Value	Behavior	0	(Default). A new window is launched when you clone or launch a new instance of x ² .	1	Only one window is used for all folders, even when you launch/clone a separate instance of x ²	2	A new tab will be opened
Value	Behavior									
0	(Default). A new window is launched when you clone or launch a new instance of x ² .									
1	Only one window is used for all folders, even when you launch/clone a separate instance of x ²									
2	A new tab will be opened									

[xplorer2/ MainFrame Settings]

Name	Default value	Description	
msFreeSpaceUpdateInterval	20000	Shows the Free space status update interval in milliseconds. If you want to have the disk free space shown on the status bar, set this to a non-zero value. For example, 5000 means “check the free space every 5 seconds”. Set to 0 to omit the indicator altogether	
binDualPaneFlags	9	DPF_SHOWHEADERS=8	Show title bar for each view pane
		DPF_NOHEADERSUBPATHS=128	The title bars exist but will not be clickable.

[xplorer2/ xxx pane settings] (where xxx is the left or right folder pane/scrap pane)

Name	Description
binMiscOptions	Add up the values for the desired options:
	CLVOPT_DISABLEAUTOREFRESH = 1 Patch/efficiency improvement for multi-folder views
	CLVOPT_NAGGINGSCRAP = 64 Scrap frames will always ask you to save contents
	CLVOPT_ARROWTABPANE = 256 Use left/right arrows to switch panes in detailed view

[xplorer2/ CommandFrame Settings]

This setting is for the console used for DOS command execution, if enabled.

Name	Description
NConsoleMaxChars	Sets the upper limit on characters displayed in the console. If this limit is reached, some of the older data in the window will disappear.

[xplorer2/ QuickView]

Name	Default value	Description
binRELangOptions	-1	<p>If you find that the text previewer gets its fonts mixed up or misbehaves (especially in East European countries), try setting this value to 0.</p> <p>You can also use any of the richedit IMF_xxx constants.</p> <p>If you make things worse you can always set it back to the default [-1].</p>

9J. Running x² from commandline

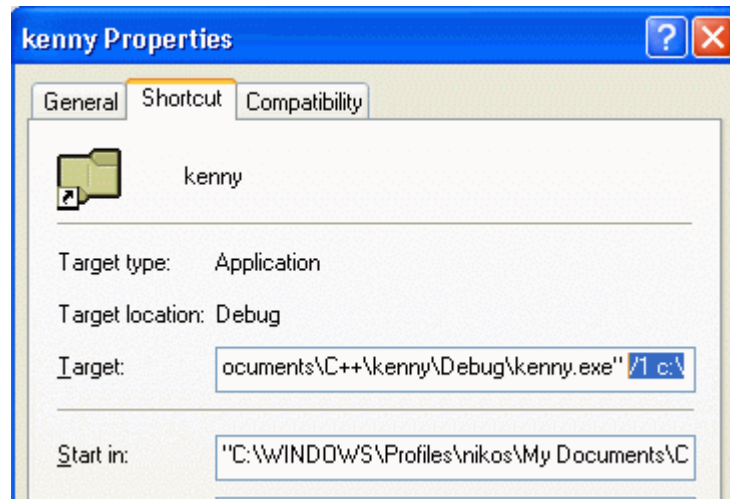
When executed from the command line xplorer² accepts a number of optional arguments that control some aspects of the program. The complete command line is:

xplorer2.exe /F:n /P /R:rootFolder /S:registryKey /L:searchFromFolder /1 /2 leftFolder rightFolder

All arguments are optional and are described in the following table.

- The last two arguments — without the / switch character — specify starting left & right pane folders for the main window (or CIDA files for scrap containers), depending on the /F switch value.
- You can also specify a **folder group** (tab group) instead of the left (or right-) folder.

Switch	Function
/F	Starting window type. By default a normal browser window is opened, equivalent to /F:0. If you want to start with a scrap window use /F:1
/P	By default xplorer ² runs in a system resource-friendly single process mode, even when you launch separate instances. Using /P you force new instances to open as separate processes.
/R	Roots the program on a folder other than the default desktop. For instance /R:c:\winnt will force both the tree and view panes on c:\winnt and won't allow users to reach other parts of the namespace unless underneath the root node; e.g. d:\ will be off-limits whereas c:\winnt\system will be accessible
/S	Registry key extension for storing program options. The default key is HKCU\Software\ZabaraKatranemia Plc\xplorer2 but you can have multiple parallel keys with different options. Keys can be changed dynamically with Window Save layout menu. For instance /S:preview will load options from the key ... \ZabaraKatranemia Plc\xplorer2.preview
/L	Causes a scrap window to issue a “Find Files” command when it first comes up. The search is rooted at “searchFromFolder”. Can only be used in conjunction with /F:1
/T	Doesn't restore folder tabs on startup (by default, you get all tabs reopened — as you left them at last use)
/1	Forces single pane mode
/2	Forces dual pane mode



You can take advantage of these options by creating a desktop *shortcut* for *xplorer*². Using the property page, add the required arguments in the **Target** field, past the executable name. The above snapshot illustrates a shortcut that launches the program using the options `/1 C:\`, which means start with a single pane and browse folder `C:\`.

You can also launch *x*² with specified folders (or folder groups) loaded in the opposite folder panes. The corresponding commands are as follows:


Notes:

1. If *x*²'s installation folder is not added to Window's *Path* environment, then you will have to issue the command with the whole path. (e.g. `D:\Utilities\x2\xplorer2.exe`)
2. If a path is not in 8.3 format (e.g. it has long names with spaces), then you will have to enclose the path in double quotes. (e.g. `"D:\Utilities\x2 beta\xplorer2.exe"`). This applies to paths in the arguments also.

9K. Program options

All the available program options are explained here.

General tab

Option	Remarks
Save program state on exit	Saves the layout, folders open in either pane, settings in search dialog (only checkboxes, not dropdown lists) at the time of exit. The next time you start x ² , it will start with these saved settings.
Show <u>H</u> idden files and folders 	If this is cleared, all items marked “hidden” (with F₁₂ or SHIFT+F₁₂) will not be visible. Caution: x ² (and so also the Windows Explorer) will allow you to delete a folder that contains hidden items. So if you clear this option, and have a lot of hidden items scattered around your PC, you run a risk of deleting the hidden items without realizing it.
Show <u>a</u> ddministrative shares for network folders	If you are an administrator, you may want to see special hidden shares (like C\$ etc) on remote machines. Check this option to enable it, but note that searching for shares may take a long time
Report all file sizes in bytes	Clear the checkbox to show the size in kB/MB/GB
<u>B</u> eep on warnings and errors	To silence the beeps upon error, clear this checkbox. The visual indications will continue.
<u>E</u> at the first mouse click in panes to protect selection	To shift the focus to a folder pane, you can use TAB , SHIFT+TAB , CTRL+TAB etc. These methods don’t disturb the selection existing in the folder pane. However, you can also switch the focus by clicking in the folder pane, which <i>does</i> destroy the previous selection if the sticky selection mode is not turned on. To avoid this problem, put a tick in this checkbox. But if you use TAB to change focus (and never use a mouse click for the purpose), you don’t need this feature. Exception: this protection will <i>not</i> work if the target folder pane has only <i>one</i> item previously selected. In that case, a click on any other item will not only switch the focus to that folder pane, but also select the new item.


Option	Remarks										
Redirect DOS command output to local console window	<ul style="list-style-type: none"> ➤ When the checkbox is ticked, uses x²'s own console window to capture output from DOS commands (using \$ syntax in the Address Bar). This console is more user-friendly: you can easily copy and search for text. ➤ When the checkbox is cleared, each DOS command executed will open a new (standard windows) console window to show output. 										
History items maintained for drop-down lists	<p>Affects the size of list remembered by x² for the Address Bar and history in folder panes, and also in all combos in other dialog boxes (e.g. robust transfer).</p> <p>Note that you will be comfortable with a history of 10 or less. Longer lists will be unmanageable. Default value: 30</p>										
Thumbnail size (pixels)	Sets the size of thumbnails (displayed in the folder panes when it is set in Thumbnails style) Default size: 120 pixels										
Item icons	<p>Choose from the following options:</p> <ul style="list-style-type: none"> ➤ Normal ➤ Simple (x² can display them faster) ➤ Plain (x² can display them fastest) 										
External text editor/viewer command lines	Allows you to specify an external program that will serve as editor and/or viewer (to view/edit the text files).										
Byte file size limits for extracting...	<p>x² extracts certain information from each file and displays it in different columns of the folder pane (e.g. checksum). However, this additional consumes CPU resources and slows down other operations.</p> <p>To make the operation more efficient, x² has a provision that it will display the information only if the file-size is <i>below</i> a threshold value. The default values are shown below.</p> <table border="1"> <thead> <tr> <th>Item</th><th>Default (bytes)</th></tr> </thead> <tbody> <tr> <td>Infotips</td><td>1000000</td></tr> <tr> <td>Checksum column</td><td>2000000</td></tr> <tr> <td>Thumbnails</td><td>2000000</td></tr> <tr> <td>Item in zip/FTP</td><td>524288</td></tr> </tbody> </table> <p>By entering a higher value, you can force x² to extract the information for larger files also. In the extreme case, enter "0" to remove all such limits: x² will now display the information for <i>all</i> files, regardless of their size.</p> <p>Keep in mind that the extraction will slow down considerably.</p> <p>Tip: If this information is not <i>really</i> required, you should turn off these extra columns (use the ALT+K command)</p>	Item	Default (bytes)	Infotips	1000000	Checksum column	2000000	Thumbnails	2000000	Item in zip/FTP	524288
Item	Default (bytes)										
Infotips	1000000										
Checksum column	2000000										
Thumbnails	2000000										
Item in zip/FTP	524288										





Window Tab





Option	Remarks
View panes	
<u>S</u> ingle click activation	When this option is selected, you do not need to d-click on an item to activate it.
<u>G</u> rid lines in detailed mode	Controls whether the folder panes will show grid lines (only when it is in Details style: in other styles, the grid is turned off.)
<u>I</u> nfotips for items	Infotips are the yellow boxes that appear when you hover the mouse over any item. They provide you with some basic information. Clear the checkbox to hide the infotips.
Full <u>r</u> ow selection	If you tick this checkbox, you will be able to select the row by clicking anywhere in the row. If you clear it, you will have to click on the Name field to select the row. Only this field is “active: The other fields behave as if they are part of “background”.
Allow slow <u>d</u> ouble-click to rename items	When this checkbox is ticked, you can rename a file/folder by clicking on it twice (“a <i>slow</i> d-click”). If this checkbox is cleared (default), you can use the context menu of the file/folder or press F₂ (default is cleared because most often you end up trying to d-click a file and trigger the rename function instead, because the second click was too late)
Hover selection	When you hover your mouse over an item, it gets selected. There is no need to click on the item. ➤ In all commands that use a mouse click and a modifier key, a hovering action replaces the click. For example, instead of CTRL+click , you have to CTRL+hover . Instead of SHIFT+click , you have to SHIFT+hover , and so on. ➤ Since lassoing requires an l-click to start, it cannot be simulated with a hovering action alone. So, you still need to click and drag the mouse across.
Automatically re-sort contents after moving/copying <u>e</u> tc.	Some applications like downloaders may be adding new items in the folder you are currently viewing. By default, the newly added items place themselves in their logical sorting order. However, this may interfere with your viewing. You can turn off the auto-sorting feature by clearing this checkbox. To turn it on again, put a tick in the checkbox.
Highlight primary sort column (XP only)	➤ When ticked, shows the sort column in a different color. ➤ Clear it to show all columns in the same color.



Option	Remarks
<u>M</u> ax list column width	In the List view mode, the folder pane display can get out of shape if there are a few items with very long names. This value poses an upper pixel width limit to protect against such mishaps.
Folders sorted	<p>During sorting, folders are treated according to what mode you choose here.</p> <p>Choose from the following modes:</p> <ul style="list-style-type: none"> ➤ As files: Folders treated like files; and intermingle with files ➤ Separately: Folders and files sorted in separate groups ➤ Mixed mode: When sorted on name or extension, folders and files are sorted in separate groups. For all other sorting, they are intermingled.
Dual pane alignment (tiling)	<p>Choose from the following modes:</p> <ul style="list-style-type: none"> ➤ Horizontal ➤ Vertical
Tree	
Single c <u>l</u> ick to change folder & “hands-free” activation	If cleared, you need to double-click to load a folder in the active pane, or press Enter . If set, you only need a single click or just leave the focus on a folder for half a second (as you browse using the up/down arrow keys)
Automatically shift focus to view after activation	When this feature is turned on, you do not have to click in the folder pane to shift focus there: the focus automatically jumps from the Tree pane to the folder pane.
<u>A</u> utomatic branch expansion when hovering on a node	Selecting this feature activates automatic branch expansion for drag-n-drop operations to the tree pane. When you hover the mouse on a node while dragging a selection, the node opens up automatically. You can drill down multiple levels down in this way to find the subfolder you want for your drop target.
Keep synchronized with folder in active view pane	The folder pane can be synchronized with the tree any time by pressing ALT+T . However, when you turn on automatic synchronization, the tree remains synchronized at all times (manual synchronization is not required).
Quick viewer	
Text preview size (<u>b</u> ytes)	<p>By default, the QuickViewer shows only the first 4096 bytes from a file. You can change this value to show more/less bytes from the beginning.</p> <ul style="list-style-type: none"> ➤ If the file is larger than the threshold, the text ‘(...more...)’ will be displayed at the bottom of the QuickViewer window.
Tab <u>w</u> idth	Specifies how many spaces are shown for each TAB in a text file (Default:3 spaces)

Option	Remarks
Start playing media files immediately	If this checkbox is ticked, the QuickViewer will start playing an audio/video file as soon as you focus on it. But if you intend to play the file with a player/jukebox, then you may like to disable the autoplay option (clear the checkbox). To play the file, you will have to press the “Play” button in the QuickViewer.
No hex_preview	To hide the Hex code in QuickViewer, tick this checkbox. Preview of several file types (zip, doc, etc) will be blanked out.
Others	
Plain menus	Only the frequently used menu options are shown. All other menu options are hidden to reduce clutter. The keyboard shortcuts are removed from view too – although they still work!
Dialog balloon help	Multi-line help text is displayed inside a balloon-shape when you hover your mouse over any input field of a dialog box. This has more detailed information than the standard “tooltip” type of help. If you want to have this “balloon” help, tick this checkbox.
Main font...	Select font for the main screen, including the tree, views and addressbar.
Inactive background (color) 	Click on the button with the colored rectangle. A window pops up, offering you a palette of colors. Select a new color and press OK . The background color of the inactive pane is changed to this new color. Tip: You may not see the new color in the inactive pane immediately: the new color will appear when you switch panes. There is no need to restart x² for the new setting to take effect.

Advanced Tab

Option	Remarks
Status bar panes	
Show total folder size	When no items are selected in the active folder pane, the status bar shows the total size of the folder that is loaded in the active folder pane.
Show disk free space	The status bar shows free space on the disk currently loaded in the <i>active</i> folder pane. Finding the free space on a continuous basis takes up system resources and slows down x ² . Unselect this checkbox to free those resources, and make x ² work faster.
Show active item information 	<p>The status bar shows the file size and modified date of the active item (i.e., the item in the active folder pane on which you have the focus). Finding this information consumes system resources, and slows down x². Unselect this checkbox to free those resources, and make x² work faster.</p> <p>Tip: When you are using Info Bars, the same information would be displayed there. Similarly, when you use <i>Detailed style</i> in the folder pane, you would most probably use size and modified date columns. In such cases, you should turn off this option to save system resources.</p>
Others	
Folder tabs on top	By default, the Tab Bar is displayed at bottom of each folder pane. If you want to move the Tab Bar to the <i>top</i> of the folder pane, select this option.
Hilight active pane's titlebar as in 2xElorer	<p>By default, x² uses different background colors for active and inactive panes, so that you do not mix up these panes and make a mistake in issuing commands.</p> <p>Some users prefer to see an even greater contrast between the active and the inactive pane. A highlighted title bar for the active pane serves this purpose. (This method was used in 2xExplorer, the predecessor of x²). This option lets you highlight the active pane's title bar.</p>
Natural number sort (XP only)	<p>When a pane is set in Details <i>style</i>, you can sort the pane on any column. By default, this sorting is in <i>lexicographic order</i> (e.g. file1, file10, file2, file20 file3...).</p> <p>But if you select this option, x² will sort the items in <i>numerical order</i> (Windows XP-style) (e.g. file1, file2, file3, ..., file10, file11, ..., file20)</p>
Don't lock browsed folder 	<p>By default, you can't delete a folder in Tree pane, because x² locks the node. Select this checkbox if you want to delete a folder (node) directly in the tree.</p> <p>Caution: <i>Note that this change will have repercussions in command line execution (no current directory).</i></p>

Option	Remarks
<p>Calculate subfolder size automatically</p>  	<p>The option turns the one-time command CTRL+D into a toggle-able mode.</p> <ul style="list-style-type: none"> ➤ If this option is unchecked, the CTRL+D command works one-time. ➤ If this option is checked, then the subfolders' sizes are calculated and displayed when you go to a new folder. <ul style="list-style-type: none"> ○ In this mode, CTRL+D acts as a switch to turn the mode on/off. <p>Tip: To know what is the current status of this mode, place the  button in your toolbar. When the mode is <i>on</i>, it will show the button “pressed” .</p> <ul style="list-style-type: none"> ○ When you are in root (D:\ etc), x² turns off the mode automatically to conserve resources. To turn it on again in the root directory, press CTRL+D twice. <p>Caution: <i>Note that this mode is a resource-hogger: It slows down all other x² operations, including display updates. Use it only if necessary!</i></p> <p>Note the following limitations of this mode:</p> <ol style="list-style-type: none"> 1. x² calculates the sizes of subfolders <i>only once</i> after you go to a folder. After that, it does not calculate the size again till you refresh the display by pressing CTRL+R (menu option View Refresh). If the subfolder size changes (for example, if some files are being downloaded into one of the subfolders), then x² will <i>not</i> show this change. 2. Even if the pane is sorted on the size column, x² does not sort the subfolders by size: You will have to manually sort the items.

Option	Remarks
Extract custom icon overlays	<ul style="list-style-type: none"> ➤ If you put a tick in this option, x² will display the overlays applied to the icons of files/folders by external applications. ➤ If the option is cleared, such overlays will not be displayed in x². (To see them, you will have to use the original application that applies the overlays.) <p>Note: Overlays are additional symbols superimposed on the regular icons of the items. You have already seen two examples of overlays:  to indicate shortcuts and  to indicate the <i>undetermined</i> items during synchronization. Some applications like Tortoise CVS use overlays to indicate the status of different items. You can allow these additional overlays to be displayed in x².</p>
QuickView docked to the right side of folder tree	Normally the QV is docked to the bottom of the folder tree pane . But when you select this option, both the folder tree and the QV will occupy the whole height of the screen. This is useful when you want to maximize the QV (and/or the folder tree).
Explorer style path autocompletion in address bar	Normally you can enter a partial path in the addressbar and then press F1 to autocomplete the path . But when you select this option, the autocompletion is done as in MicroSoft Explorer:
User friendly date column information	Normally the date column shows the exact dates. But if this option is selected, x ² will show the date in more humanized (but vague) terms; such as <i>Today</i> , <i>Yesterday</i> , <i>This month</i> , <i>Last month</i> , <i>Last year</i> , <i>Long ago</i> , etc.

9L. Boolean multi-strings

Many input fields in x² accept comma-separated lists instead of a single string. For example:

- Instead of a single wildcard like `*.cpp`, you can have a visual filter that comprises many of them, separated by commas, e.g. `*.cpp, *.h, *.rc`.
- Instead of searching for a single keyword in a file (using Mark | Containing text), you can search for many keywords separating them by commas.

In such fields the comma character is “reserved” and has special meaning, separating the list elements. Later we’ll see how you can *escape* this default behaviour, e.g. when you want to search for a comma verbatim.

There are more special characters supplying a “Boolean” meaning to individual list items:

Leading +	The item is compulsory (AND); All such items <i>must</i> be present; otherwise the match fails
Leading –	The item must <i>not</i> exist (NOT); Even if a <i>single</i> negative item is present, it is enough to fail the match

In this sense, list items without any leading + or – are considered optional, i.e. in the Boolean “OR” sense. Note that the characters + and – have this special meaning only if they are in a leading position, e.g. immediately following a separator comma character. When they are found in other positions they have no special meaning and are considered literally.

Let’s see an example. If you specify `*.cpp, -a*` as a visual filter, it will select all items that have the **cpp** extension, except (notice the leading – in the second substring) those that start with the letter **a**. So `file.cpp` is ok whereas `another.cpp` is out!

Boolean multi-strings are very useful in text hyperfilter rules (see the **Find** command). For example you can search for files that have the Archive attribute and not the Hidden attribute by specifying an attribute rule like `+A,-H`. They can also be used to search for multiple keywords in comments etc.

What if you want to search for a comma? Simply use **two** commas in a row like `“,,”`.

9M. EXIF data

Digital cameras save JPEG (jpg) files with EXIF (Exchangeable Image File) data such as camera settings and scene information. You can also attach EXIF data to scanned images.

When this data is displayed in x^2 columns, you can search for a particular condition(s), identify the photos and decide what to do (e.g. whether to delete them or edit them with GIMP, etc). This is also a great learning tool for amateur photographers: You can compare the parameters of different photos and their effect on the photos.

Some EXIF tags are explained below (the tag names have been simplified). The actual field names may vary, depending on your EXIF column handler software. Also, depending upon your EXIF column handler, you may not be able to see some of the EXIF tags

Camera/Software information

EXIF tag	Description	Comments
Make	Name of the manufacturer of camera	If your folder contains photos taken with multiple cameras, you can identify the camera for a given photo.
Model	Camera model	
Max Aperture	Maximum aperture possible with the camera	

Notes: This information is useful for identifying the camera with which a photo was taken.

Shooting conditions

EXIF tag	Description	Comments
Subject distance	Distance between the camera and the subject, given in meters.	Values: <i>Actual distance in meters/ unknown/ infinity</i>
Subject area	The location and area of the main subject in the overall scene.	Expressed in one of the following ways: <ul style="list-style-type: none"> ➤ Coordinates (x, y) ➤ Circular area (center coordinates, diameter). ➤ Rectangular area (center coordinates, area dimensions)
Light source	Type of source of light available for the photo	Values: <i>Daylight, Fluorescent, Tungsten (incandescent light), Flash, Fine weather, Cloudy weather, Shade, Daylight fluorescent (D 5700 – 7100K), Day white fluorescent (N 4600 – 5400K), Cool white fluorescent (W 3900 – 4500K), White fluorescent (WW 3200 – 3700K), Standard light A/B/C, ISO studio tungsten, etc</i>

Note: You can search for specific shooting conditions, and then apply correction to the photos. For example, removing a particular color tinge caused by ambient light.

Camera settings for the shot

EXIF tag	Description	Comments
Speed	Shutter speed (seconds) =Exposure time	Either a fraction of a second (like 1/250) or a number of seconds (e.g. 2)
Aperture value	F-stop for the image	The value is expressed as a fraction of the focal length of the lens (e.g. 4 means the aperture was F/4)
ISO speed	Sensitivity of the camera's sensor (ref: ISO 12232)	Some cameras use proprietary format for this setting. Similar to film sensitivity in a still camera.
Focal Length	Focal length of the lens	The value is in millimeters. ➤ The value is <i>not</i> converted to 35mm equivalence ➤ For <i>zoom</i> lenses, this is the focal length used for the current image.
EV	Exposure Value =Exposure Bias	Correction applied by the user to the exposure selected by the camera. Measured in EV. Examples: ➤ +0.5 = <i>half step brighter</i> , ➤ -1 = <i>one step darker</i> . ➤ "None" = <i>no correction applied</i>
Program	Determines how the camera chooses the exposure	Values: <i>Program, Aperture Priority, Shutter Priority, Manual, Normal program, Creative program (biased toward depth of field), Action program (biased toward fast shutter speed), Portrait mode (for close-up photos with the background out of focus), Landscape mode (for landscape photos with the background in focus)</i> Note: Some cameras call this feature "Modes".
Metering	Metering mode (Which part of the frame is used to measure the exposure)	Values: <i>Average, Center-weighted average, spot, multi-spot, pattern, partial</i> , etc.
Flash	Combines information about flash mode and firing status in separate bits of a tag.	Modes: <i>Auto/On/Off/Red-eye/Slow Sync</i> , etc. Actual flash-firing status: <i>Fired /Not fired</i> .
White balance	White Balance setting =Color mode =Light source type =Color temperature	Some cameras use proprietary format for this setting. Analogous to the type of film used (<i>daylight, incandescent</i> , etc).
Digital zoom ratio	Digital zoom ratio when the image was shot.	0 means <i>no digital zoom was used</i> . Remember that a <i>digital zoom</i> degrades the picture quality; so photos with higher digital zoom ratios may require some touch up. (Some may be even so bad that they are useful only as thumbnails or for displaying on a monitor: you can't take a print!)

Information about the image

EXIF tag	Description	Comments
Date/Time	Date and time the image was recorded	In YYYY:MM:DD HH:MM:SS format
Time Shot	Time when the picture was shot	
Time digitized	Time when the picture was digitized	
Description	Image description	
User Comment	Comment recorded by user	EXIF supports user comments in many character sets.
Artist	Text	Camera owner, photographer and/or creator of image. This information is useful if you have collected photos taken by many people.
Copyright	Text	
File Source	File source	Options: <i>Blank</i> /"digital camera"
Scene Type	Used to distinguish between original and scanned/processed image.	Options: <i>Blank</i> / " <i>photographed</i> " ("Photographed" means "as photographed".)
Screen capture type	Type of scene that was shot.	Values: <i>Standard</i> / <i>Landscape</i> / <i>Portrait</i> / <i>Night scene</i>
Height	Image height	Measured in pixels
Width	Image width	
Resolution Unit	Unit in which X and Y resolution are measured	Options: <i>inch/cm</i>
X-resolution	X Resolution	Measured in pixels per Resolution Unit
Y-resolution	Y Resolution	

Note:

1. Be aware that your camera may not be capable of handling all EXIF tags correctly.
2. Some cameras use proprietary format for some EXIF tags, which may not be handled properly by your EXIF column handler.

9N. Handling file-transfers that get aborted repeatedly

Sometimes, you have a folder that just can't be copied/moved easily: Windows reports some errors, and the file transfer is aborted halfway.

You may like to skip the problematic files that cause these errors and transfer the rest. You may also like to get these problematic files short-listed (so that you can investigate them and find a solution if possible).

With Windows Explorer, there is no direct or indirect way to do this. You have to manually compare the two directories, which is an extremely difficult (if not impossible) task.

With x² PRO, the **robust file transfer** command takes care of all problematic files: it can skip all problematic files, and keep a log of all such files; so that you can check on these files after your file transfer is over.

However, the **robust file transfer** function is *not* available in the **Lite** version. Even then, you can transfer problematic files without any errors *and* with far less effort, as described below:

The following procedure describes steps to be taken for *copying* a folder. Later we will see small changes in that procedure when we have to *move* a folder (rather than *copying* it):

1. You will need two windows simultaneously: one x² and one scrap container. Set them up as follows:
 - In x², load the source folder and the destination folder in the opposite folder panes.
 - **Flatten** the source directory in a scrap container. Resize and move this scrap container window so that you can see the destination folder pane in x²'s window. Then make this scrap container "Stay on top" (using PowerMenu).

Now you are ready for action!

2. In the scrap pane, select a batch of files and press **CTRL+C**. Then r-click in the destination folder in x² window, and select **Paste special | Structured scrap clips**. (This action will automatically shift the focus to the x² window.)
 - If all the selected items are OK, x² will paste them in the destination directory. (It will first duplicate the source folder's hierarchy in the destination folder, and then place the items in their correct subfolders.)
 - If the batch has a problematic file, the file transfer will stop in the middle of the batch, and an error window will pop up. The rest of the files are not transferred, even if they are perfectly OK. Close the error window and continue with the file transfer.
 - We will deal with files that did *not* get across in the next step. However, you can try to transfer the last batch again; by breaking it up into a few smaller batches. In case some of these files are already copied to destination folder, x² will ask you if they are to be overwritten. Respond with **Yes to all**.

The advantage of transferring files in small batches is when a problem occurs, only *that* small batch is aborted. Most of the batches *will* get across without any problem.

3. Once all the batches are transferred, then it's time to check which files did not get across, and which of them are indeed problematic.
 - To **flatten** the destination folder in the empty pane of the scrap container, click in the empty pane of the scrap container and select the **Actions | Flatten path...** menu option.

Now the scrap container has the source and the destination directories (both flattened) in opposite panes.

- Compare the two flattened directories with **CTRL+F**, command (select *Unique* and *File contents* options in the dialog box). Look at the “source” pane: All files that were *not* transferred will be highlighted. We want to concentrate on these files only; so press **ALT+CTRL+J** to hide the rest. Press **ALT+A** to unselect all.
4. We know that most of these files are *not* problematic (they were stopped merely because Windows found a problem with a *preceding* file). So we will try again to transfer these files. But there will be a much higher proportion of problematic files here, so repeat step-2 with a *much smaller* batch size.
Once you cover all files, repeat step-3 again; so that your “pending” list gets shortened.
 5. You may have to repeat step-4 a few times till you feel that your “pending” list consists mainly of problematic files only; (i.e., *most* of the “good” files are already transferred).
 6. Now you are ready for the final step: checking out the “*potentially problematic*” files. Try to open each file with its default application.
 - If a file can be opened, it may not be corrupted. Try to copy it across.
 - If it can’t be opened, you have located a faulty file! You will have to either discard it or replace it with a good one.

Some variations:

1. The first two steps of the procedure are applicable only when you are trying to copy a problematic folder from scratch. If you already have copied the folder partially, then follow the procedure described above from step-3 onwards.
2. For *moving* the directory across (rather than *copying* it), the procedure is slightly different:
 - In step-2, press **CTRL+X** instead of **CTRL+C**
 - Skip step-3, because when you successfully move a file, it will disappear from the “source” pane. So all you have to do is make small batches and try moving them to x²’s destination pane. Finally, what is left in the “source” pane *is* problematic!

90. Common interface amongst multiple commands

Three important commands in x² share many common elements in their interfaces, which are explained here. Click on the hyperlinks below to see the remaining part of interfaces of these commands.

Sl	Command	Description
1	ALT+G	Mark (mass-select) all items that match a complex rule
2	ALT+H	Show all items that match a complex rule (hide the rest)
3	CTRL+F	Find files, folders and computers on the network
4	F5 or F6	Robust transfer commands

The common interface looks like this:

The screenshot shows the 'Rules' dialog box in x2. It includes a 'Named:' field, checkboxes for 'Files' and 'Folders', and a 'Containing Text' section with options for 'Case sensitive', 'Search all files', 'Whole words', and 'Verbatim'. A 'Use RegEx to search' checkbox is also present. A dropdown menu for 'Assumed encoding for text files without BOM' is set to 'Default'. A list of 'Additional Rules' is shown, including 'Modified date within the last 1 month(s)', 'Path contains "image"', and 'Size value from 3K to 10K'. A 'Predefined:' dropdown and a 'Save' button are at the bottom. A 'clear' button is at the bottom left. A list of control characters is shown in a box on the right: End of line, Tab, Return, Line feed, Space, Comma, Dollar (\$). A red circle highlights a set of buttons: a plus sign, a minus sign, a left arrow, and a right arrow. Arrows point from various annotations to these elements.

Search non-text files also

Use RegEx to search

Control characters selected from here are added to the combo on the left.

Assumed encoding for text files without BOM

Do not process special characters: Search for text exactly as typed

Buttons to-

- Add a new rule
- Delete selected rule
- Edit selected rule
- Move the selected rule up
- Move the selected rule down

Save the set of rules (for reusing later)

Select from previously saved rule-sets

Rules are executed in top-down order

1. Clear (reset) all fields at once (to start from scratch)

2. To delete a predefined rule-set, load it, and then press **Clear and **Save**.**

Boolean relations between rules (AND, OR, NOT)

The controls are arranged in four logical groups:

Group	Function
Named	<ul style="list-style-type: none"> ➤ Specify names (full, or partial with wildcards) ➤ Select what to find: files, folders or both
Containing text	<p>Specify text to search for.</p> <ul style="list-style-type: none"> ➤ Specify the text string with the main combo box. Add control characters (e.g. end of line, tab, etc.) using the pull-down menu at the right. ➤ The Case-sensitive option looks for exact match. For example, if you are looking for <i>Able</i>, it will ignore <i>ABLE</i> and <i>able</i>. ➤ The whole words option ignores if the search string is part of another word. For example, if you want to search for the word <i>able</i> in this mode, <i>x²</i> will ignore the words <i>table</i>, <i>capable</i>, <i>cable</i>, etc. ➤ The Search all files option allows you to search non-text files also, such as doc, pdf, etc. ➤ A pull-down menu allows you to assume an encoding type for a text file that has no BOM. ➤ The RE checkbox allows you to search with <i>Regular Expressions</i> (also called <i>RegEx</i> or <i>RegExp</i>). When you select this option, the other selections in this section become redundant.
Additional rules	<p>Each line in this “rule-stack” is an independent rule. You can define multiple rules and set Boolean relationship (AND, OR, NOT) between them.</p>
Predefined	<ul style="list-style-type: none"> ➤ Save a set of all current conditions, to reuse it later. (Once saved, the set is available in all the three commands.) ➤ Select a set of conditions from previously saved sets and reuse it. Before using the set, you can add new conditions, remove some of the conditions or edit the conditions.



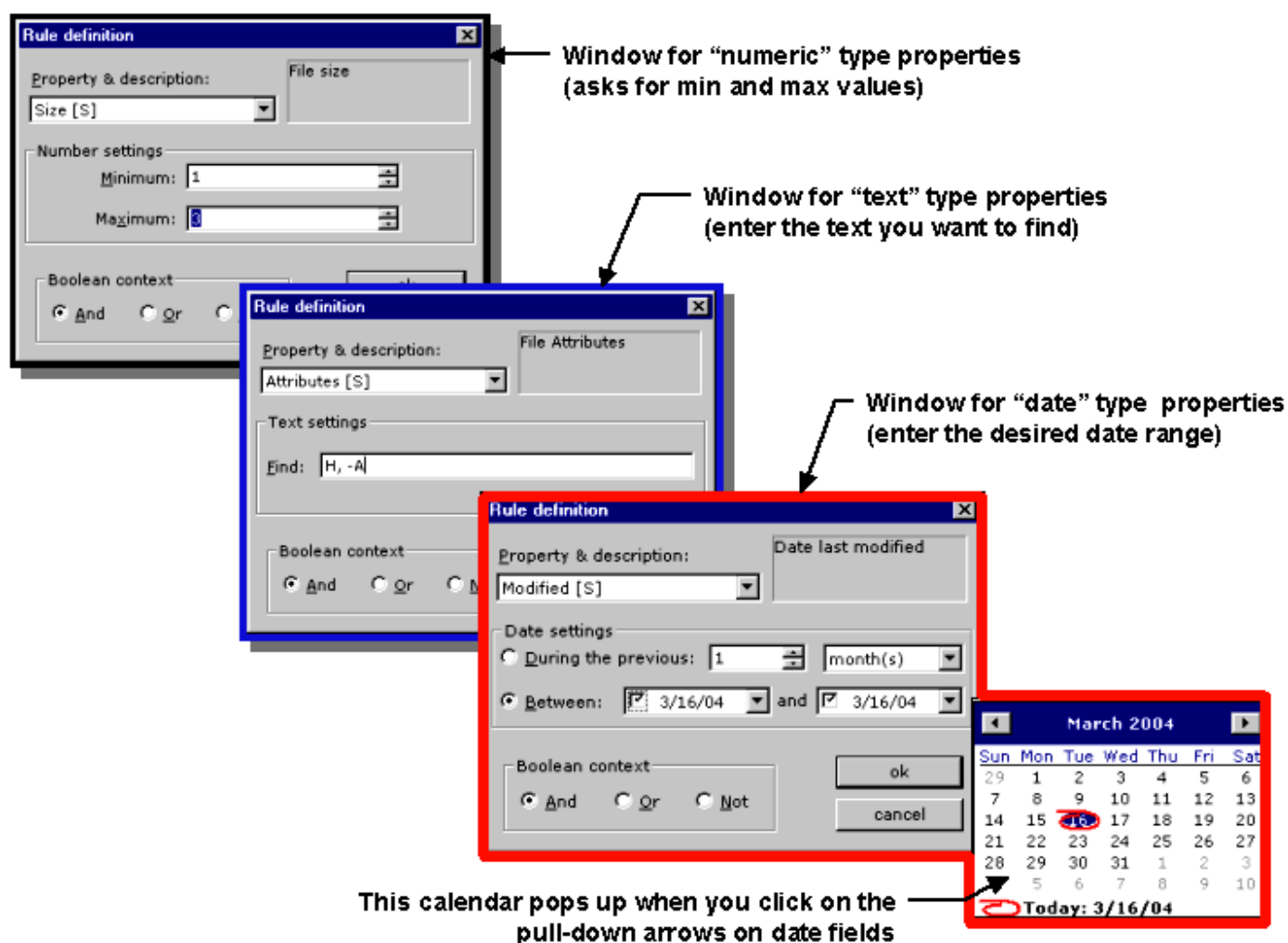
These sections are explained below in more details.

1. In the **Named...** field, enter the name you want to match.
 - If you want to look for a single word, there is no need to pad the word with asterisks (*) on both sides: x^2 does that automatically for you.
 - You can enter *multiple* entries here. Each entry must be padded with an asterisk (*) on both sides. Separate each entry with a comma. (Example: `*house*,*cat*,*dog*` will search for items having **house**, **cat** or **dog** in their names.)
 - You can enter *phrases* (containing multiple words). The entire string of words between two commas (including spaces) is treated as a single phrase.
 - Do ***not*** try to compose a phrase by using quotes (“”) around it (as you do in Google), because x^2 looks for all characters, including quotes and spaces, *exactly* as entered.
 - Spaces at the *beginning* of a single word (or the entire phrase) are ignored. But spaces at the *end* of the word/phrase (i.e. just before a comma) are not ignored: x^2 will look for an *exact* match for strings having these space(s).
2. In the **Containing text...** field, enter your desired text.
 - You can look for multiple text strings simultaneously. Enter all entries at once, separated with commas.
 - Do *not* try to pad your entries with asterisks (*); because x^2 will look for those asterisks also! (In other words, this field does not treat * as a wildcard, but as a literal character to search for.)
 - If you have selected the **RE** checkbox, you will have to enter a RegEx pattern in this field. **Appendix 9T** explains RegEx syntax.
3. The **Additional Rules** section is very powerful: it allows you to define rules (conditions) involving different *properties* of the files and folders. This section also allows you to combine these individual rules to form a complex rule. For example, the figure above shows this additional rule: *Find items that have size between 3000 and 10000, or whose path contains the word “image”, but were not modified within last 1 month.*

All the properties of files and folders fall in 3 main categories:

1. Numbers (size, size on disk, links, checksum)
2. Text (attributes, type, path, version, medium, 8.3 name, comments)
3. Date (created, modified, last accessed).

x^2 has a rule-definition window that takes three different forms to handle these 3 categories, as shown below:

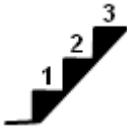


The window is composed of three sections, as described below. Only the middle section changes according to the property selected: the top and bottom sections are common in all windows.

Section	Remarks
Property and description	Provides a pull-down menu of all available properties. Each Windows has a default list of properties, which can be extended by using certain extensions. See Chapter-8 for details.
Settings	Set the conditions using controls provided here.
Boolean context	Select the Boolean context (AND, NOT, OR) of the current rule vis-à-vis other rules.

To start composing a new rule, follow this procedure:

1. To add a new individual rule, click on the  button (or d-click inside

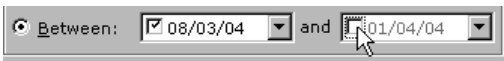



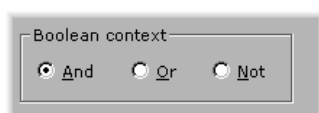
the stack pane). A window pops up.





2. In each window, a short description about the selected property is displayed in the right-hand top corner. Using that as your guide, select a property. Immediately, x² senses the *type* of the selected property and changes its middle section accordingly.
 - You can abandon the entries made in the current window at any time, and select another property (of any type) from the pull-down list.
3. Enter the conditions for this property using the controls provided in the middle section of the window. The controls for all types of properties are explained below:
 - In **number** type window, you may skip either **Min** or **Max**: it is not necessary to define both. On the other hand, if you want to search for an exact number, enter the same number in *both* **Min** and **Max** fields.
 - Apart from the **Min** and **Max** combo fields, the **number** type window also has a combo box to specify the multiplier: 1, kilo, Mega and Giga. For example, to specify 1 MB (sorry-no decimals!), you can enter 1 in the combo and select the **Mega** from the drop-down list.
 - **Tip:** Both numbers share the same unit; so if you want to specify two widely different limits (say, one limit in kB and the other in MB), then you will have to convert the figures suitably.
 - In **text** type window, a + sign before the text means, “*this text must be there positively in the item*”; where as a – sign before a text means, “*this text must not be there in the item*”.
 - To search for non-printable characters, use their ASCII code, in the \$xx format.
 - The **Attributes** are treated as “text”. (The **attribute column** is a string that contains letters A, H, S, R etc.). So, use + and - to assign the Boolean context for **AND** and **NOT** respectively. For example, searching for +A, -H within file attributes will match files that have the **A**rchive but *not* the **H**idden attribute.



- In **date** type window, the **between** field is provided so that you can search for an item that is created/modified/accessed *between* the specified two dates. The left date is the lower limit, where as the right date is the upper limit in the range. By removing one of these limits, you can search for an item that is created/modified/accessed *before* (or *after*-) a specified date. To do this, simply *disable* the other date field by *un-checking* its checkbox (see the figure below).

Setting	What it means
 <p>The second date is unchecked (disabled)</p>	After 3 rd August 2004
 <p>The first date is unchecked (disabled)</p>	Before 4 th January 2004



- Use the bottom section of the window to define how this rule would be related to the other rules in the “stack”. Select one of the three relationships, and press **OK**.
 - x^2 interprets the rules as follows:
 1. *All* **AND** rules must be satisfied
 2. *At least one* of the **OR** rules must be satisfied.
 3. *None* of the **NOT** rules must be satisfied.
 - If you are not familiar with Boolean algebra, just leave the default **And** button checked.
- Repeat steps 1-4 to set other individual rules.
- Once all individual rules are set, review the set for the last time. If required, edit the set:
 - To edit a rule, d-click on the rule (or select it and click on the  button). The rule opens in its window. Edit the values and press **OK** to save the changes.
 - To delete a rule, select it and press **DEL** (or click on the  button).
 - To change the *sequence* of the individual rules in the stack, select any rule and press the  and  buttons (to move it up and down, respectively) till the sequence is set correctly.
- This completes the setting of common interface. Complete the other settings of the respective command, and then launch the command.



Warning: *Take extra care to avoid subtle error conditions. x^2 will try its best to validate rules but it is not fool-proof. For instance, it will allow you to set two contradicting rules (e.g. size less than 1K and size greater than 2K) resulting in a filter that will never be satisfied.*

The saved (“predefined”) sets of conditions can be used as follows:

To do this...	Follow these steps
Save the current set of conditions	Type a new name in the Predefined field, and then click on the Save button. From now on, the set is available in all the three commands.
Reuse a set	Using the pull-down menu of the Predefined field, select the desired set. All the saved conditions will be loaded in the respective fields. Press OK to run the search. ➤ Before launching the command, you can edit the search conditions. This editing will <i>not</i> affect the original set.
Edit a set and save it	Select a set from the pull-down menu of the Predefined field. All the conditions will be loaded in the GUI. Edit them as required, and click on the Save button.
Edit a set and save it as a different set	Select a set from the pull-down menu of the Predefined field. All the conditions will be loaded in the GUI. Edit them as required, and then enter a new name in the Predefined field. Now click on the Save button.
Delete a predefined set	Select it from the pull-down menu of the Predefined field. Click on the Clear button, which will clear (reset) all fields. Now click on the Save button. This effectively deletes the set: It is no longer available from the pull-down list of the Predefined field.

9P. How the *Structured scrap clips* command works

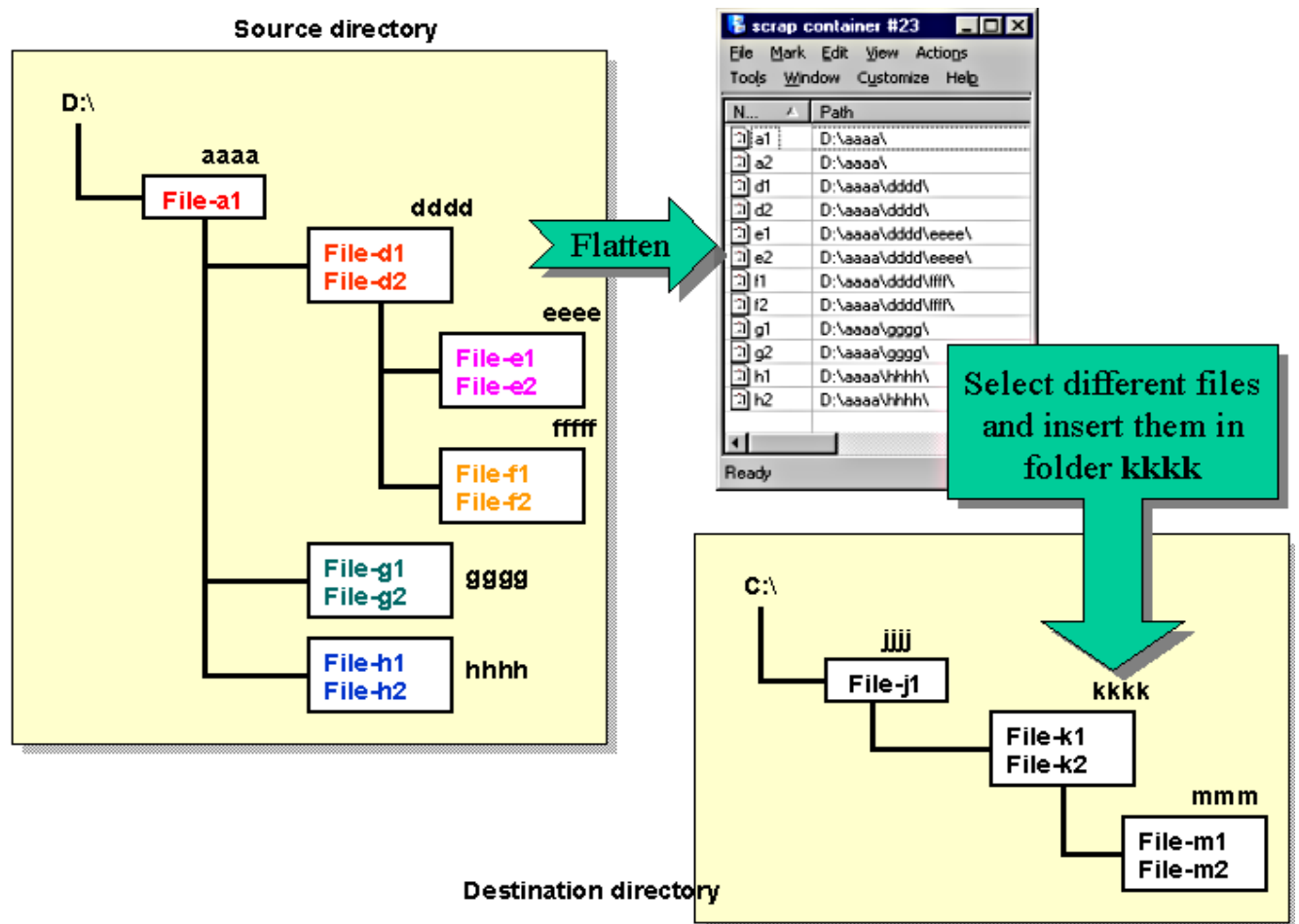
The Structured scrap clip command creates a mirror directory structure according to the following rule:

- If the files belong to different folders of the source directory, all such branches are traced upwards till a common “ancestor” folder is found. Each of these branches is copied into the target folder. The common ancestor folder itself is not copied.
- Once the folder structure is duplicated, the selected files are copied in their mirror positions.
 - If the selection contains any files from the common ancestor folder, they are placed in the target folder directly.

The functioning of the command is explained below with an example.

As shown in the following figure, we have a source directory (folder **aaaa**). We will **flatten** it into a scrap pane. We will select different combinations of files from this scrap pane, copy the selection into clipboard and paste them in the destination folder (**kkkk**) using the **structured scrap clips** command.

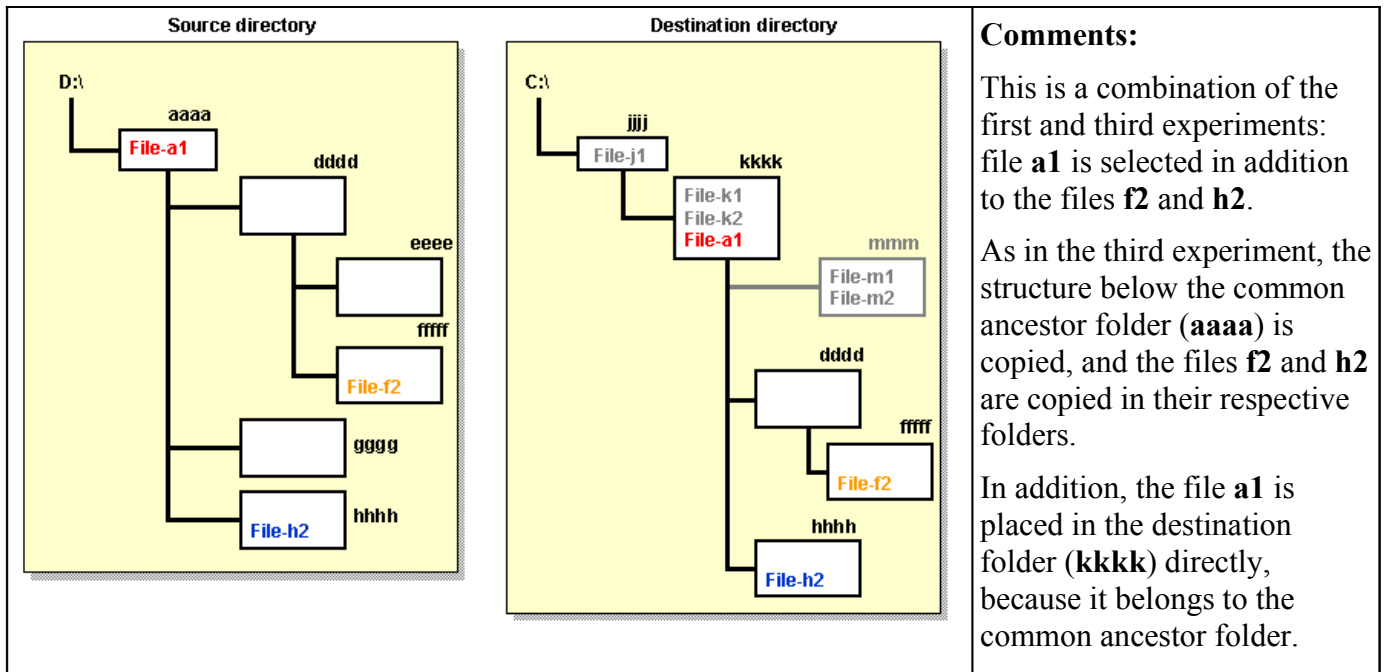
Our aim is to see how this command responds when the selected files have different *relative* positions.



In the figure, folders are represented with rectangles, and their names are written beside the rectangles (e.g. **aaaa**). The filenames (**a1**, **e2** etc.) are derived from folder names, for ease of understanding.

We will conduct four separate experiments (see the figures on next page). In each figure, only the files selected for copying are shown in the source directory: the rest are not shown. Similarly, in the destination directory, the original structure is grayed out, so you can focus on the structural changes caused by the **structured scrap clips** command.

<p>Source directory</p>	<p>Destination directory</p>	<p>Comments:</p> <p>The common ancestor is folder dddd. So the directory structure <i>below</i> this point is copied, but this folder itself is not copied. The file d1 belongs to this common ancestor, so it is placed in the target folder (kkkk) directly. The other files are placed in their respective folders.</p> <p>Since files e2 and f1 were not selected, they are not copied. Similarly, folders aaaa, gggg and hhhh are not copied.</p>
<p>Source directory</p>	<p>Destination directory</p>	<p>Comments:</p> <p>This experiment is similar, except that file d1 is not copied.</p> <p>The structure <i>below</i> dddd is copied, and then the selected files (e2 and f2) are placed in these folders, as before.</p>
<p>Source directory</p>	<p>Destination directory</p>	<p>Comments:</p> <p>Here, the files f2 and h2 belong to different branches. Also, the folders ffff and hhhh are at different levels.</p> <p>x^2 traces branches of both files to the common ancestor (folder aaaa). The structure is copied, and then files f2 and h2 are placed in it.</p> <p>Note that although folder dddd is empty, it is copied for the sake of its subfolder ffff, which in turn contains a selected file f2.</p>



Note that in the source directory, the command totally ignores the directory structure *above* the common ancestor folder. For example, imagine that the source directory (which starts with the folder **aaaa**) is located four levels down (In other words, its new address is **D:\xxxx\yyy\zzzz\aaaa**). Even in that case, the result would have been *exactly the same* in all the examples above.

If your selection contains files from *different* drives, they would not have a common ancestor folder. In such cases, x² reports that the relative folder structure is ambiguous and aborts the paste operation. In such cases, the best you can do is select files from one drive at a time and use the *structured scrap clips* command. Check the resultant directory structure, though: it may not be what you expected!

9Q. How to use Editor²

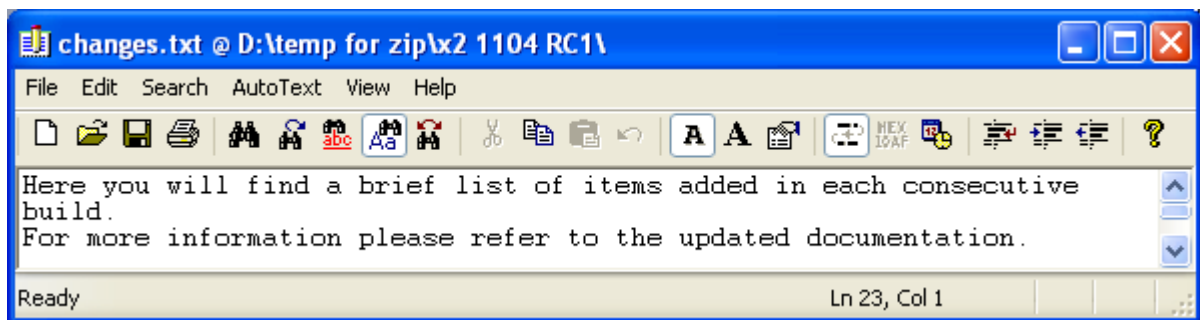
Editor² is the companion product for x², and is included in the installer.

How to launch Editor²:

- To launch Editor² directly from x², just select a file and press **F₃** (*read-only mode*) or **F₄** (*edit mode*). x² launches Editor² and loads the file in it.
 - While you are using Editor², you can toggle the mode between *read only* and *edit* by pressing **F₆**.
- You can also use the Editor² independently: the installer has an option to install its start button in the Quick Launch Bar. You can also launch it from your PC's **Start | xplorer2 Pro** menu (if you are using x² **Lite**, then this is available in **Start | xplorer2 Lite** menu).

Editor² interface:

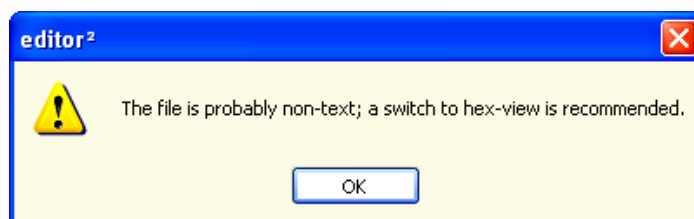
The Editor² interface is shown below (I have reduced its height to accommodate the screenshot here):



- Note that the name of the opened file is shown in the windows title bar, along with its complete address.
- The status bar at the bottom serves 5 different purposes:
 1. It shows the current status (“Ready” in this example)
 2. When you hold the mouse over any menu option, its prompt message is shown here.
 3. The right-side shows the location of the cursor (line number, column number)
 4. The edit mode (Insert/Overwrite) is indicated. (The mode can be toggled with the **Ins** key.)
 5. The coding style (Unicode, Unix, etc) is shown in extreme right corner





Using Editor²:

When the program is launched, it checks if the document is non-text; and prompts the user to view it in Hexadecimal mode.








The following pages explain its toolbar buttons and menu options. Using Editor² is so intuitive that further instructions are not required.

File menu (Editor²)






Option		Shortcut	Function
New		CTRL+N	Create a new document in a new frame
Open		CTRL+O	Open an existing document
Insert file		CTRL+I	Insert a text file at the insertion point
Refresh		F5	Refresh the display (read the file again from the disk)
Clone		CTRL+D	Open the current document in a new window
Save		CTRL+S	Save the active document
Save as...			Save the active document with a new name. It also allows you to change the text coding to OEM, UTF8, UNICODE-16 or Unix (LF).
Print		CTRL+P	Print the active document
Page setup...			Change the printing options (see figure)
Recent file (list)			Shows a list of recently opened documents. Click on any one to reopen it.
Close		ESC	Close this window. If the document is changed, a prompt will appear to save it.
Exit		ALT+X	Quit the application (close all windows)

Edit Menu (Editor²)

Option		Shortcut	Function
Undo		CTRL+Z	Undo the last action
Redo		CTRL+Y	Redo the last undone action
Select all		CTRL+A	Select the entire document
Cut		CTRL+X	Cut the selection and paste it into clipboard
Copy		CTRL+C	Cut the selection and paste it into clipboard
Paste		CTRL+V	Paste the clipboard contents at the cursor
Overwrite		Ins	Toggles between <i>insert</i> and <i>overwrite</i> modes

Option		Shortcut	Function
Delete line		CTRL+L	Delete the whole line under the cursor
Insert date			Insert current date and time at the cursor position
Case			Provides the following choices (select any one):
Case Upper		CTRL+SHIFT+U	Change selection to uppercase
Case Lower		CTRL+U	Change selection to lowercase

Search menu (Editor²)

Option		Shortcut	Function
Find		CTRL+F	Find the specified text
Find next		F3	Repeat the last search action. Tip: If you search for some text in x ² using CTRL+F , CTRL+G , ALT+G or ALT+H commands, that text is shared with Editor ² instantly. You can continue searching for it in Editor ² using F3 .
		SHIFT+F3	Repeat the last search action in <i>upward</i> direction
Whole word			Searches for the whole word (ignores if the text is found to be a <i>part</i> of a bigger word)
Case-sensitive			Search in case-sensitive mode
Find selection		CTRL+F3	Find another occurrence of the selection (if there is no selection, then Editor ² looks for the word under the cursor)
Hide highlights			The “Find all” option of the Find command highlights all matching strings. <i>This</i> command cancels those highlights.
Replace		CTRL+R	(Find and-) replace specific text with different text
Match brace		CTRL+B	Locate the brace that matches the selected one. (see note-2 below)
		CTRL+SHIFT+B	Locate the brace that matches the selected one, and select the text enclosed in this pair of braces.
Goto line		CTRL+G	Jump to the line with specified number
Set bookmark		CTRL+F8	Stores the current cursor position (for returning later to it)
Goto bookmark		F8	Jump to a previously bookmarked position

Notes:

1. The **Whole word** and **Case-sensitive** commands are *not* there in the menu options: they exist only in the toolbar buttons. Despite that, they are shown in this table because the other menu options are closely related to them.
2. Editor² expects braces to be in complementary pairs, never alone. Further, it expects each pair to consist of an opening brace and a closing brace, as shown below:

Opening brace	Closing brace
()
{	}
[]
<	>




Further, it knows that within a pair, the opening brace comes *before* the closing brace.






- If you have a pair of braces like) (, then Editor² will treat both braces as belonging to different pairs.
- If you have selected a *closing* brace such as >, then Editor² looks *backwards* for its matching (opening) brace, <.
- Editor² handles nested braces also, such as (())

Autotext menu (Editor²)


Option		Shortcut	Function
Mnemonics			Show/hide the “toolbar” that shows all stored mnemonics
<list>			List of auto-text blocks (select any one to insert it at the cursor position)

View menu (Editor²)

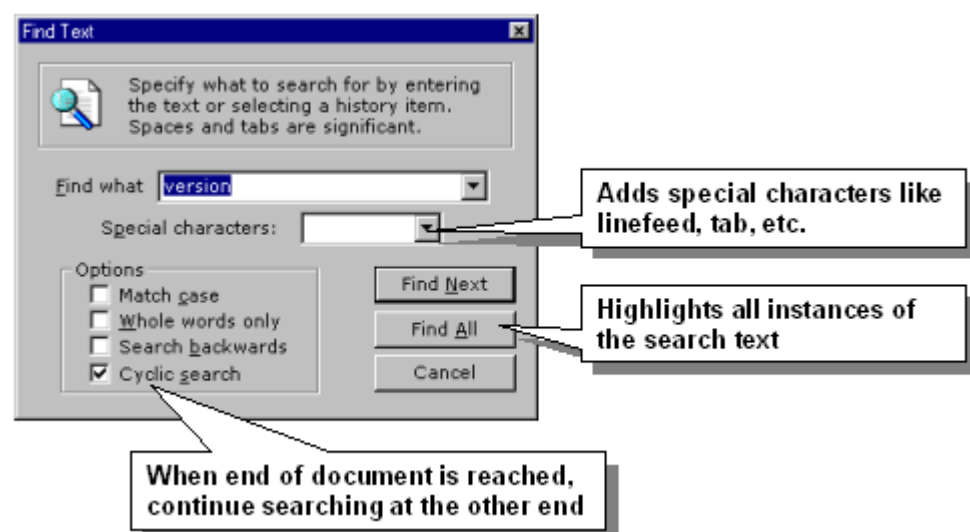
Option		Shortcut	Function
Toolbar			Toggles the toolbar on/off
Status Bar			Toggles the Status Bar (at the bottom) on/off
Windows...		CTRL+W	Shows a list of all editor ² windows. Switch between them by clicking or pressing the number shown against each window.
Word wrap		F2	Toggles word-wrap feature on/off.
Hexadecimal		F4	View data in Hexadecimal format. In this mode, you cannot edit the file (read-only).
Read only		F6	Toggles between <i>read-only</i> and <i>editable</i> modes
Auto-indent		F7	Toggles automatic indentation of new lines with respect to the previous lines.
Indent			Change indent of the current line. Select one of the following options:

Option		Shortcut	Function
Indent Increase		ALT+RightArrow	Increase the indent by one level (to the right)
Indent Decrease		ALT+LeftArrow	Decrease the indent by one level (to the left)
Font			Change the default fonts using one of the following options:
Font Fixed		ALT+F1	Use the default fixed-pitch font
Font Proportional		ALT+F2	Use the default proportional font
Options...			Change program options (see the figure on page 306).
External viewer		F12	Open the document in an external viewer

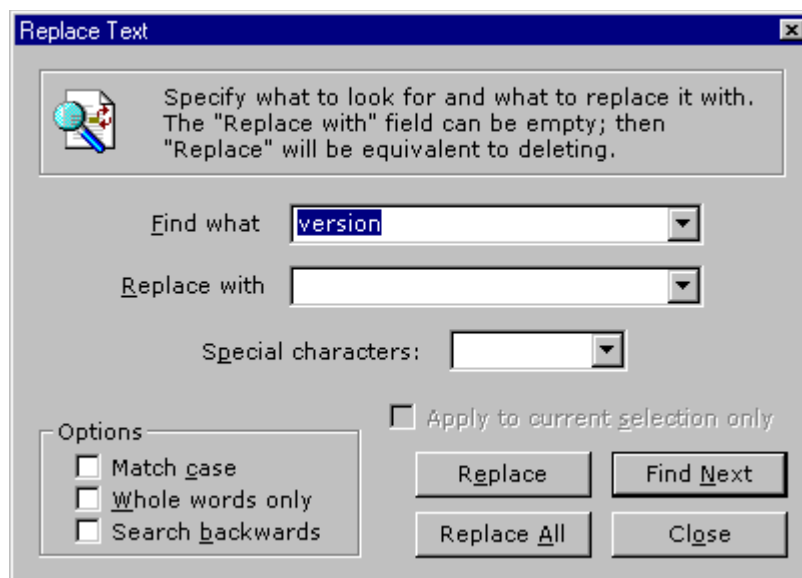
Help menu (Editor²)

Option		Shortcut	Function
Statistics			Shows the statistical summary of the current document (see the figure on page 306)
Information...			Shows a quick help file.
About Editor ²			Shows program version, author, website, etc

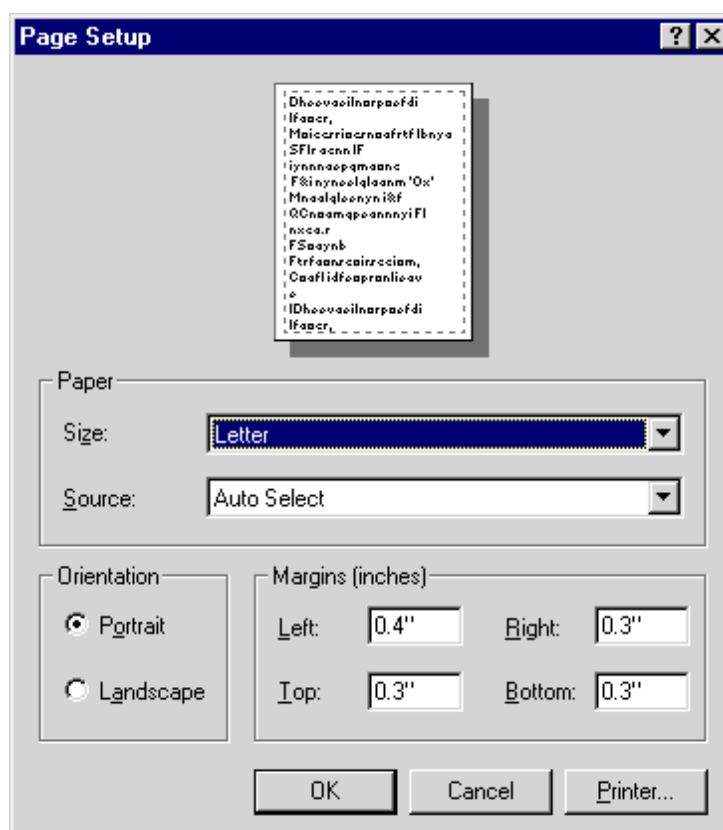
Find



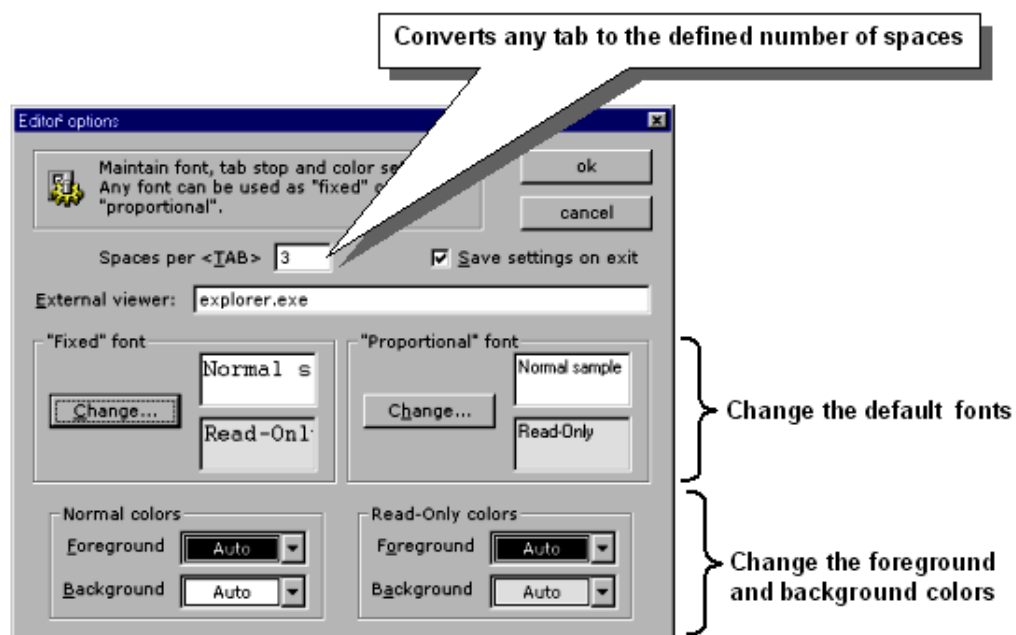
Find and replace



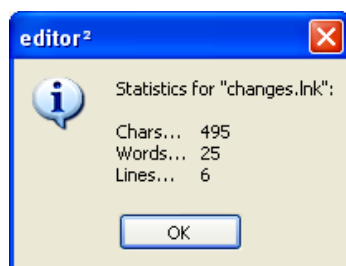
Page setup



Program options



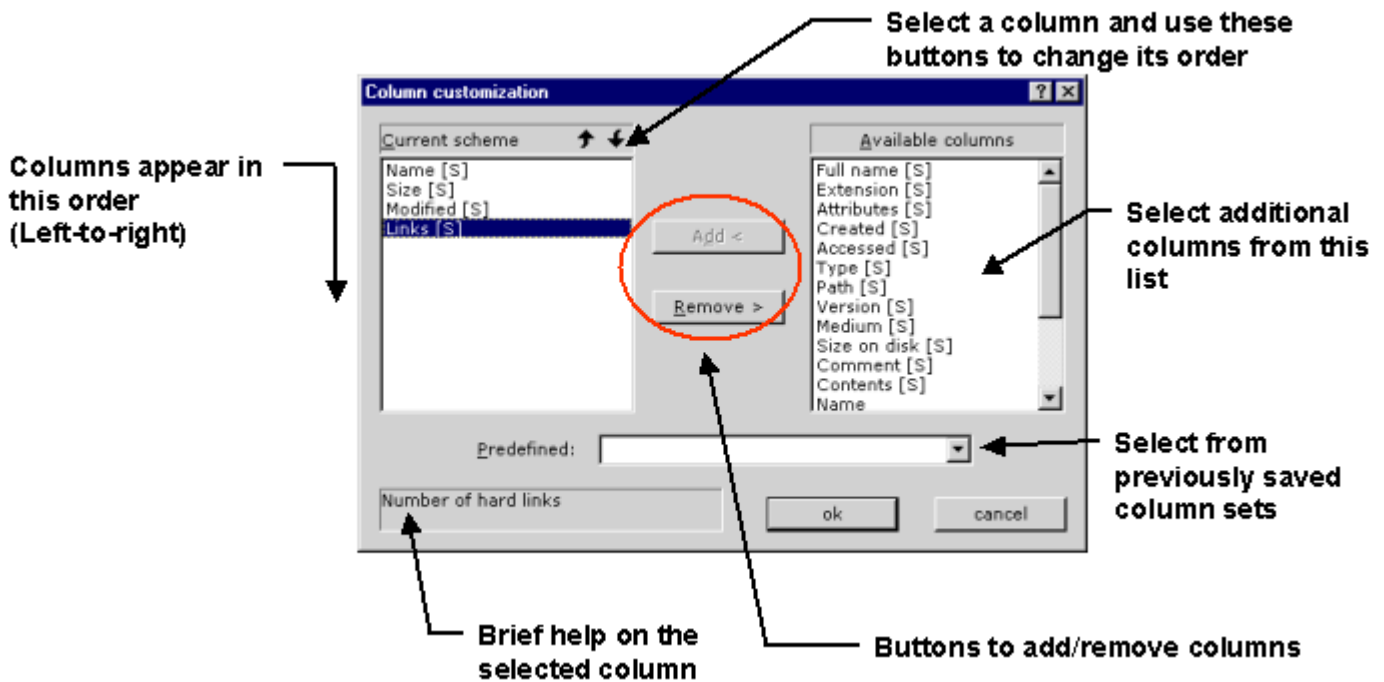
Statistics



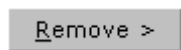
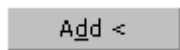
9R. Column Organizer

The **Column Organizer** is used to add, remove and re-order the columns in **Folder Panes**, **Scrap panes** and **Info Bars**. Refer to these sections to know how to start column organizer.

The organizer has a window as shown below:



Use this organizer as follows:



- To add a column, select an additional column in the *right*-hand pane and then press the **Add** button. (Instead of pressing the **Add** button, you can also d-click on the selected column's entry to add it directly.)
 - This button gets activated only when you select a column in the right pane.
 - Only one column can be added at a time.
- To delete a column, select an existing column in the *left*-hand pane and then press the **Remove** button. (Instead of pressing the **Remove** button, you can also d-click on the selected column's entry to remove it directly.)
 - This button gets activated only when you select a column in the right pane.
 - Only one column can be removed at a time.
- To change the order of the columns, select a column and either drag-n-drop it to the desired position; or press the **UP** and **Down** buttons at the top of the organizer window till the column settles at the desired position.
 - Only one column can be moved at a time.
- When you have finished, press **OK**. The new column arrangement takes effect immediately.

9S. Setting colors in panes

You can set x^2 to change the color of folder panes and scrap panes when a filter is active. You can also customize the color of the active panes. Both these settings are done through registry settings (not from the **Tools | Options** menu). This appendix will help you set the exact desired color.

While specifying color, keep in mind the following points:

1. Universally, it is normal to specify a color in RGB (for “Red, Green, Blue”) format, where each color is specified as a 2-digit Hexadecimal value (000000=black, FFFFFFFF=white, FF0000=red, 00FF00=green, 0000FF=blue). But on Intel systems, you have to enter the colors in the reverse order (i.e., Blue-Green-Red).

For example, if you want to enter an RGB color value of **FF00AA**, then set the color value to **AA00FF**.
2. Further, the registry values are specified in 8 digits, where as the color-settings need only 6 digits. As a result, there are two extra hex digits at the beginning. You *must* set these first two bits to **00**; otherwise the color settings will not take effect. For example, to set a color to **red**, enter the value **000000FF**. (This example is color-coded only to illustrate which digit sets which color.)
3. In the chart overleaf, a palette of some colors is given. It also shows the color values in **RRGGBB** format. While entering these values in the registry, do not forget to reverse these pairs and also add **00** in front. (For example, the value **AABBCC** becomes **00CCBBAA**.)
4. The table overleaf shows only some sample colors. You can change the **RRGGBB** values to create your own colors. Experiment!
 - Changing only one color at a time will change the shade.
 - Changing any two colors also will change the shade.
 - Changing all 3 colors simultaneously by the *same amount* will not change the shade: it will lighten or darken the color. To lighten a color, reduce its RR, GG and BB numbers by the same amount. To darken the color, increase the RR, GG and BB numbers by the same amount.

Color	RRGGBB	Color	RRGGBB	Color	RRGGBB	Color	RRGGBB
	000000		696969		B8860B		FAEBD7
	000080		6A5ACD		BA55D3		FAF0E6
	00008B		6B8E23		BC8F8F		FAFAD2
	0000CD		708090		BDB76B		FDF5E6
	0000FF		778899		C0C0C0		FF0000
	006400		7B68EE		C71585		FF00FF
	008000		7FFF00		CD5C5C		FF00FF
	008080		7FFFD4		CD853F		FF1493
	008B8B		800000		D2691E		FF4500
	00BFFF		800080		D2B48C		FF6347
	00CED1		808000		D3D3D3		FF69B4
	00FA9A		808080		D8BFD8		FF7F50
	00FF00		87CEEB		DA70D6		FF8C00
	00FF7F		87CEFA		DAA520		FFA07A
	00FFFF		8A2BE2		DB7093		FFA500
	00FFFF		8B0000		DC143C		FFB6C1
	041690		8B008B		DCDCDC		FFC0CB
	191970		8B4513		DDA0DD		FFD700
	1E90FF		8FBC8F		DEB887		FFDAB9
	20B2AA		90EE90		E0FFFF		FFDEAD
	228B22		9370DB		E6E6FA		FFE4C4
	2E8B57		9400D3		E9967A		FFE4E1
	2F4F4F		98FB98		EE82EE		FFEBCD
	32CD32		9932CC		EEE8AA		FFEFD5
	3CB371		9ACD32		F08080		FFF0F5
	40E0D0		A0522D		F0E68C		FFF5EE
	4682B4		A0CE00		F0FFF0		FFF8DC
	483D8B		A52A2A		F0FFFF		FFFACD
	48D1CC		A9A9A9		F4A460		FFFAF0
	4B00B2		ADD8E6		F5DEB3		FFFafa
	556B2F		ADFF2F		F5F5DC		FFFF00
	5F9EA0		AFEEEE		F5F5F5		FFFFE0
	6495ED		B0C4DE		F5FFFA		FFFFFF0
	66CDAA		B0E0E6		F8F8FF		FFFFFFF
			B22222		FA8072		

9T. Regular Expressions (*RegExp* or *RegEx*)

Regular expressions (“RegExp” in short) are used to find text that meets complex search conditions. You can use regular expressions to search text files and those *non-text* files for which *Ifilters* are installed on your PC. (We will use a common term, “*text*”, to mean the contents of all such files.)

In RegExp mode, x² searches the text for the search string *as entered* (just like in the “normal search” mode). This is called *literal matching*. But the real power of RegExp lies in its ability to specify complex search conditions. All these conditions are added to the search string itself (you do not need separate checkboxes to specify conditions like “whole words”, “case-sensitive”, etc.) To define these conditions, RegExp has its own syntax (grammar). The RegExp search strings are called *RegExp strings* or *patterns*.

To compose these special conditions in the RegExp strings, Windows borrows the characters **\$. ^ { [() * + ? ** from English script and attaches special meaning to them. These characters are called *metacharacters*. (The prefix *meta* means ‘of higher order/level’)

Whenever x² sees a metacharacter in a RegExp string, it *interprets this metacharacter*, rather than looking for its exact match. But these characters are also commonly used in the English text; and so we may have to find a literal match for them. Now this poses a problem: How to enter the same character in a RegExp string, sometimes as a metacharacter and sometimes as a “normal” character, and yet be clear which is which? RegExp has a simple answer: In its plain form, a metacharacter is interpreted, and when the metacharacter is preceded by a ****, it is treated as a “normal” character. (That’s why **** is called “*the escape character*”.)

For example, the period (.) is a metacharacter, which means “any single character” in a RegExp pattern. But we also use the period at the end of a sentence. So, to search for a literal match with the period itself, use **\.** In the RegExp pattern.

Note that the **** plays the reverse role also: Certain “normal” characters are turned into *abbreviations* when **** is attached in front of them. Each abbreviation represents a *class of characters*. For example, **\w** means “a word character”, and **\a** means “an alphanumeric character”. We will see more of this *later*.

The rest of this appendix explains how different Regular Expressions work.

Keep in mind the following:

1. RegExp strings are case-sensitive by default. Therefore, the words *cat*, *Cat*, *cAt*, *CAT* and *caT* are not equivalent.
2. The RegExp syntax differs somewhat across different languages and operating systems. So, if you are used to a different flavor (e.g. PERL) of RegExp, you will have to adjust to the Windows flavor (in general it has a smaller set; and some metacharacters are interpreted differently). The following table explains the generic RegExp syntax, and then shows how the Windows version differs.

Note: In the following examples, the patterns themselves are shown in **orange**. Pay special attention to the text marked in **blue** and **red** color: The **blue** part gives you a clue why the text matches the RegExp pattern, while the **red** part gives you a clue why it does *not* match the RegExp pattern.

Metacharacters can be functionally divided in several groups, as described below:

Metacharacter that represents a single character

Meta-character	Pronunciation and Meaning	Example
.	<i>Dot</i> or <i>period</i> . Matches any single character A, B, C...Z, a, b, c...z, 0, 1, 2...9	c.t will match cat , cbt , cct , c1t , c2t , cAt , cBt , etc.

Character classes (“character sets”) and ranges

These match only one out of several characters.

Meta-character	Pronunciation and Meaning	Example
[]	Square brackets. Indicates a character class. Matches any <i>one</i> (and <i>only</i> one) character in the brackets. The order of the characters inside the brackets does not matter: The results are identical.	b[aiu]t matches bat , bit or but ; but not bot or bait . b[aiu]t is same as b[uiat]t , b[iuat]t and b[auit]t .
-	Hyphen. In a character class, indicates a <i>range</i> of characters.	[0-9] matches any <i>one</i> digit, from 0 through 9 [A-Z] matches any <i>one</i> character, from A to Z [2-5] matches any <i>one</i> digit, from 2 , 3 , 4 or 5 .

Note: You can also combine the two techniques shown above in a single class.

For example, the RegEx **[D-Qc-f1-5]** matches any one character in the range **D** to **Q** or any one character in the range **c** to **f** or any digit in the range **1** to **5**. Note that all the options are simply entered next to each other; *without* any separators, such as commas or spaces.

Metacharacters that represent the same expression repeated multiple times

Many a times, the RegEx string has to repeat the same expression multiple times. For example, to search for a 3-digit number (i.e., any number from 100 to 999), we can use the RegEx string **[1-9][0-9][0-9]**. But that is not a very efficient method. RegEx uses *quantifiers* to search for “n-times repetition of a given expression”, as shown below:

Meta-character	Pronunciation and Meaning	Example
?	Question mark. Indicates that the preceding expression is optional: It repeats once or not at all	Colou?r matches Color and Colour . A[0-9]?4 matches A4 and A24 , but not A254 .
*	Asterisk. The preceding expression is repeated zero or more times; making it optional (compare * with ?)	6[2-4]* matches 6 , 62 , 622 , 624 , 632 , 644424 , etc. But it will <i>not</i> match 8 , 22 , 24 , 65 , 6134 , etc
+	Plus. The preceding expression is repeated one or more times	[0-9]+ matches 1 , 13 , 666 , 93615 and so on. [A-Za-z]+ matches a word of any length; provided it does not contain any digit.
??, +?, *?	The ? , + , and * metacharacters are greedy : They match as <i>much</i> as possible. When ? is added to them, they become non-greedy, and match as <i>little</i> as possible.	Assume that the searched file contains the text <abc> Hello world! <def> . Then- ➤ <.*?> will match <abc> , where as- ➤ <.*> will match <abc> Hello world! <def>

Meta-character	Pronunciation and Meaning	Example
{m,n}	<p>Interval. Repeats the preceding expression <i>m</i> to <i>n</i> times.</p> <ul style="list-style-type: none"> ➤ <i>m</i> is the lower limit (minimum); and <i>n</i> is the upper limit (maximum) for the repetition. ➤ You may omit any <i>one</i> limit (either <i>m</i> or <i>n</i>), but <i>not both</i>. 	<p>[0-9]{3,5} matches any number that has 3 to 5 digits (Any one number from 000, 001, 123, ... 999, 1000...99999.)</p> <ul style="list-style-type: none"> ➤ [0-9]{2,} will match a number with 2 or more digits ➤ [0-9]{,4} will match a number with 4 or less digits. <p>Note: The ?, + and * metacharacters are special cases of the interval: They are equivalent to {0,1}, {1,} and {0,} respectively.</p>

Note: The *interval* is described here for completeness' sake only: Windows does not support intervals.

Miscellaneous metacharacters

Here are some metacharacters that do not belong to any particular group.

Meta-character	Pronunciation and Meaning	Example
^	<p>Caret. When placed at the start of a character class, it <i>negates</i> the entire character class. (The “anything but these” operator)</p> <p>Note that ^ is placed <i>inside</i> the brackets.</p>	<p>b[^a]t matches all the 3-letter words beginning with b and ending with t; and a middle letter that is <i>not</i> a or i.</p> <p>So this pattern will match words such as bbt, bct, bdt, etc.; but will <i>not</i> match bat or bit. It will also <i>not</i> match longer words such as bait or belt.</p>
()	<p>Parentheses. Groups a sub-expression (as in a mathematical equation).</p> <p>It allows you to apply a quantifier to the entire group (and not just to the character preceding it).</p> <p>It also makes the expression more readable.</p>	<p>(d+),*d+ matches a list of numbers separated by commas; such as 1 or 1,23,456.</p> <p>Note that the * applies to the entire subexpression enclosed in the ().</p> <p>In many RegEx flavors, putting () around a subexpression also generates a <i>backreference</i> for it (explained below); but in Windows flavor of RegEx, <i>curly braces</i> {} are used to generate backreference.</p>

Backreference

A RegEx string may contain one or more sub-expressions that are repeated multiple times. In that case, you can ask Windows to remember the matching text for each sub-expression, by enclosing it in curly braces **{}**.

Windows can remember matches for 10 different sub-expressions by their *backreference*; which is in the form **\n**, where *n* refers to the (n-1)th sub-expression in the string. (In other words, **\0** refers to the *first* sub-expression; **\4** refers to the *fifth* sub-expression, and so on.) Instead of typing the sub-expression again and again, just enter its backreference in the RegEx string.

- In Windows flavor of RegEx, *n* starts with 0 (in other flavors, *n* starts with 1).

Apart from saving labor, the backreferences are also used for the following purposes:

Purpose	Example with explanation
To detect a repeated word	<code>{[A-Za-z]+\}\0</code> The expression enclosed in curly braces matches with a word; and its backreference <code>\0</code> looks for a repeat of that matched word. The entire expression will return a match only when a word is repeated.
To find a matching opening/closing tag (in HTML, XML, etc.)	<code><[hH][1-6]>.*?<\0></code> The angular brackets <code><></code> and the forward slash <code>/</code> are literals. The subexpression inside the curly brackets <code>{}</code> matches with tags like h1 , h2 , etc (or their ALLCAPS equivalent, like H1 , H2 , etc). The <code>. * ?</code> matches all characters enclosed by the pair of tags in <i>non-greedy</i> mode. The backreference <code>\0</code> represents the text that matched with the subexpression in enclosed in <code>{}</code> . Effectively, this RegEx string will return text enclosed in matching pairs of tags <i>and</i> the tags themselves.

Anchors

Certain metacharacters are used to specify a certain *position* in the text (e.g. “at the beginning” or “at the end”). In other words, they do *not* represent any character. They are called “anchors” because they “anchor” (=attach) the RegEx at a particular position in the text. Only after anchoring can you start the comparison between the text and the RegEx (to check if they match).

Note that when you find a match for the anchor, it is a zero-length match. (The text does *not* have any character that matches the anchor.)

Meta-character	Pronunciation and Meaning	Example
^	Caret. If ^ is placed at the beginning of the RegEx, x² tries to match the RegEx with the <i>beginning</i> of the string.	<code>^[abc]</code> will only match strings that begin with a , b , or c . <code>^bat</code> will match strings that begin with bat . <code>^[^BC]</code> will only match strings that do <i>not</i> begin with B or C . Note that in the last example, we used ^ twice: The first as an anchor, and the second as “ <i>anything but</i> ” operator.
\$	Dollar (sign). If \$ is placed at the end of a RegEx, it matches with the text at the end of the string.	<code>[2-4]\$</code> matches a single digit in the range 2 to 4 , <i>if</i> it is located <i>at the end</i> of the searched text. Keep in mind almost all files would have a period (or a question mark or an exclamation mark) at the end of the text. You must include this notation in your RegEx pattern, otherwise x² will not find the pattern (because technically it is not at the end of the file.) Also, keep in mind that some files may have tabs, spaces, line feeds, etc at the end. Your RegEx pattern must include them as well.

Meta-character	Pronunciation and Meaning	Example
\b	<p>Word boundary **</p> <p>It can be used at <i>any one</i> or <i>both</i> end(s) of the word.</p> <p>When used at <i>both</i> ends of the word together, it is equivalent to the “whole words” search condition.</p>	<p>\bthe matches the and their; but <i>not</i> father or bathe.</p> <p>the\b matches the and bathe, but <i>not</i> father or their.</p> <p>\bthe\b matches <i>only</i> the; <i>not</i> father, their or bathe.</p>

** Four different positions qualify as *word boundaries*:

1. Before the first character in the string, if the first character is a word character.
2. After the last character in the string, if the last character is a word character.
3. Between a word character and a non-word character that follows it.
4. Between a non-word character and a word character that follows it.

Logical operators

These metacharacters are logical (Boolean) operators used on RegEx sub-expressions.

Meta-character	Pronunciation and Meaning	Example
	<p>Alternation (logical OR) operator: It separates two expressions, <i>exactly</i> one of which matches</p>	<p>T the matches The or the, but will <i>not</i> match he or she.</p> <p>ca ut matches either cat or cut, but will <i>not</i> match cot.</p>
!	<p>Exclamation mark. Negation operator: RegEx will match with a text only if the text does <i>not</i> contain the expression that follows !.</p>	<p>a!b matches a <i>not</i> followed by b. For example, it will match ac and ad, but will <i>not</i> match ab.</p>

Some special metacharacters are listed below:

White space metacharacters

White space metacharacters are invisible to the naked eye, and we ignore them while reading the file. However, while searching for text, x² cannot ignore them. Therefore, while composing your search string, you have to account for them. If you do not include these metacharacters in the search string, x² may miss the file(s) you wanted.

Metacharacter	Description
\f	Form feed
\n	Line feed
\r	Carriage return
\t	Tab
\v	Vertical tab

Abbreviations

You can also use the following abbreviations in the RegEx, to simplify the expression.

Abbreviation	Matches	Equivalent to-
\a	Any alphanumeric character	([a-zA-Z0-9])
\b	White space (blank)	([\t])
\c	Any alphabetic character	([a-zA-Z])
\d	Any decimal digit	([0-9])
\h	Any hexadecimal digit	([0-9a-fA-F])
\n	Newline	(\r (\r?\n))
\q	A quoted string	(\"[^\"]*\") ('['']*')
\s	White space (either a space or a tab)	[\t]
\w	A single word character	([a-zA-Z])
\z	An integer	([0-9]+)

Note: **\W**, **\S** and **\D** negate their lowercase version: **\W** means *not a word character*; **\S** means *not a white space* and **\D** means *not a decimal digit*.

Note a special case: **\B** matches at any position between two word characters as well as at any position between two *non*-word characters.

RegEx Modes:

Modes of RegEx change the behavior of the search, just like “switches” in a DOS command. Typically, expressions such as **/i** (case-insensitive mode) and **/m** (multi-line mode) are used. However, there is a wide variation amongst different RegEx flavors.

Windows does not support modes, with the exception of greedy and non-greedy (also known as “lazy”) modes explained below.

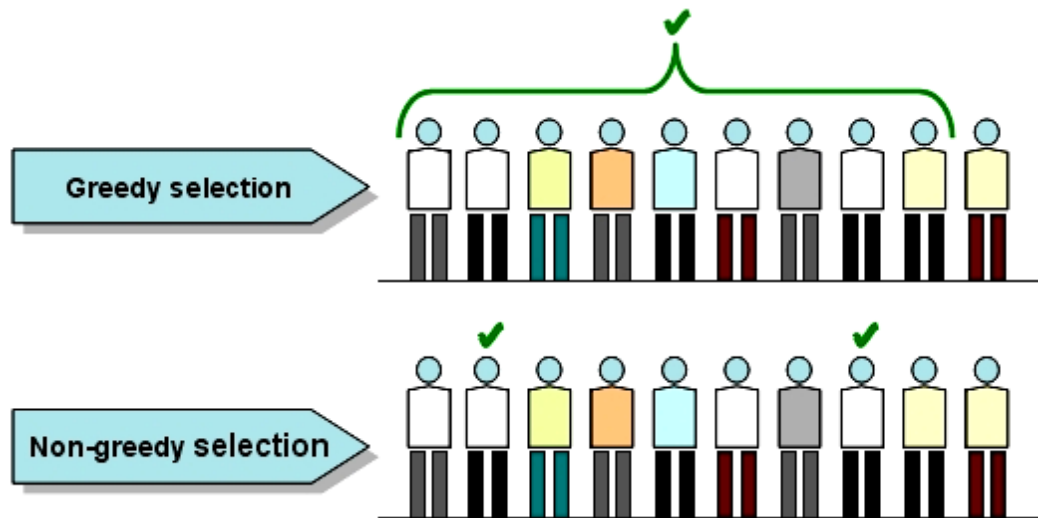
The Greedy and non-greedy (“lazy”) modes of RegEx:

Let us understand the greedy mode of search with an example: Suppose some people are standing in a queue, and we are asked to select people wearing white shirt and black pants. In this example, the *shirt* is analogous to *the beginning part of the RegEx string*, and the *pants* are analogous to *the trailing end of the RegEx string*. We don’t have any search conditions for what comes in between, such as necktie, belt, etc. This is analogous to the **.*** or **.*?** inserted in the RegEx string.

- In *greedy* mode, we will start with the first person with white shirt, and continue our selection till we find the *last* person in the queue wearing black pants.
 - The two persons we selected may not be wearing the full set of *white-shirt-and-black-pants*.
 - All the persons standing between these two persons are selected, *regardless of what they are wearing*!

As a result, we can end up selecting a few people even if *none* of them is wearing the full set of *white-shirt-and-black-pants*.

- In *non-greedy* mode, we will pick only those persons who are wearing a white shirt *and* black pants. (If more than one persons meet this requirement, we will pick all of them.)



Naturally, the *non-greedy* mode picks up more meaningful matches.

How x² behaves differently from a true RegEx engine:

As a file manager, x² differs from a true RegEx search engine in the following ways:

1. Many RegEx patterns represent multiple values. For example, `\d+` represents a number with one or more digits. A true RegEx engine will search the entire file and highlight all strings that match such a RegEx pattern. But x² looks only for a *single* match for the RegEx pattern. As soon as it finds the *first* match, it will stop searching the current file, list the file in the search results and move on to check the next file. (For a file manager, this logic is correct.)
2. If you view this file with QV, all instances of the “found” string will be highlighted. However, the other possible values that your RegEx pattern can take are ignored.
3. In QV, only the *first* match follows the RegEx rules exactly. However, the subsequent matches do NOT follow those rules. For example, if you have searched for the RegEx `/bthe/b`, x² will find the first match correctly, with breaks (spaces) on both sides. However, when you view the file in the QV, it will *also* highlight the words **The**, **the**, **there**, **Them**, **nevertheless**, etc.



Caution: When you have used RegEx in your search, do not expect QV to show all the matching strings accurately.

9U. Changes in this version of the User Manual

In the table below, four terms provide a hint about the nature of change-- whether the change is in the x^2 product or only in the manual:

- “New” means a new feature is introduced in the product; where as “Added” means there was no change in x^2 (Either the description of an *existing* feature is added to this version of the User Manual, or the additional material is not directly related to x^2).
- “Modified” means an existing feature in x^2 is modified, where as “Corrected” means an error in the manual is corrected in this version.

Page	Change
11	Added: Each page of this manual now carries hyperlinks to the top of the previous-, current- and next chapter.
23	New: Status bar panel for <i>item index</i> (can be used for “slide shows”)
28	New: Panes can show items in groups (only in Windows XP and later)
36	Added: Saving, clearing and suspending folder-specific settings
47	New: Sorting in panes behaves differently when items are grouped
50	New: Manual override for sorting (you can position an item anywhere in the pane)
51	New: Shortcuts for group-based navigation
68	New: Command to select files that have specified text in their contents or any of the text-type columns
69	New: Shortcuts for selecting and unselecting groups
79	New: The <i>recent file</i> list in scrap windows shows recently accessed CIDA files
79	New: Option to save CIDA file with UNC names for PC-independent access
91	Added: How to run a “slideshow” using the <i>QuickViewer</i> and <i>Index Number</i> panes.
95	New: Icons in bookmarks and customize menus increased to 20
112	New: Two options for robust transfer: <i>clear "A" source attribute</i> and <i>copy only existing files</i>
112	New: Hyper filters in robust transfer (only for filesystem items)
158	New: Command to select enough items that total up to a specified size
162	New: Ctrl+Alt+C copies selected paths to clipboard as a comma separated list
165	New: Command CTRL+ALT+P to copy only the active column
167	New: The context menu command Paste special Multi paste drops same content on all selected folders
217	New: The \$U token represents the UNC path (for network-wide file access)
219	Added: Earlier version explained only the more common errors. Now all possible error messages are explained (some errors may be rare, though).
228	Added: In the previous version of manual, Appendix 9D described only the menus. Now it includes all non-menu controls also (including the mouse-actions).
254	Added: Appendix now shows the <i>types</i> of x^2 columns (date/text/number)
255	New: Stock column for shortcut target path
258	New: Explorer options added to the context menu of the pane background .

Page	Change
270	New: Registry options: GIOPT_NOCOLCACHE, GIOPT_RENFULLNAME and szNewFileExt
283	New: Advanced option for user-friendly date columns (today/yesterday/...)
290	New: Robust transfer commands now share the common filter interface with other commands
310	Added: Appendix 9T updated to clarify some RegEx concepts

Notes:

- The table shows changes since x² version 1.4.0.0
- Only significant changes (which affect the users) are mentioned in this table: Correction for typographical errors and rephrasing to make the manual more comprehensible are not mentioned.
- To jump to any changed part, click on the page number (in the left column of the table)

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