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**NOTE:** The range of medical conditions that WorkPace is aimed at preventing have many different names, names which can often vary greatly from country to country (e.g. *Occupational Overuse Syndrome* (OOS), *Cumulative Trauma Disorder* (CTD), *Work-related Musculoskeletal Disorder* (WMSD)). Consequently, in order to avoid confusion the term *Repetitive Strain Injury* (RSI) has been used throughout this manual/help, this term presently being the most commonly recognised. It is stressed, however, that the term RSI is far from an accurate description of many conditions, and some of the other terms may be far more suitable. The reader is therefore asked to keep this in mind and to substitute for RSI the term that they prefer.

# Introduction

## What is WorkPace?

WorkPace and the information in this manual will help you redress the mismatch between the modern computer and the modern computer user. Unlike the past, today the user is the limiting factor, not the computer. Computers can work all day and all night, do hundreds of things at once, and take in information much faster than we can possibly enter it. If many hours are spent using a computer each day this mismatch in the human-computer interface can cause increased stress, reduced work efficiency, and in the worst cases physical injury (Occupational Overuse Syndrome(OOS) or Repetitive Strain Injury\* (RSI)). We need to improve the way we use the computer.

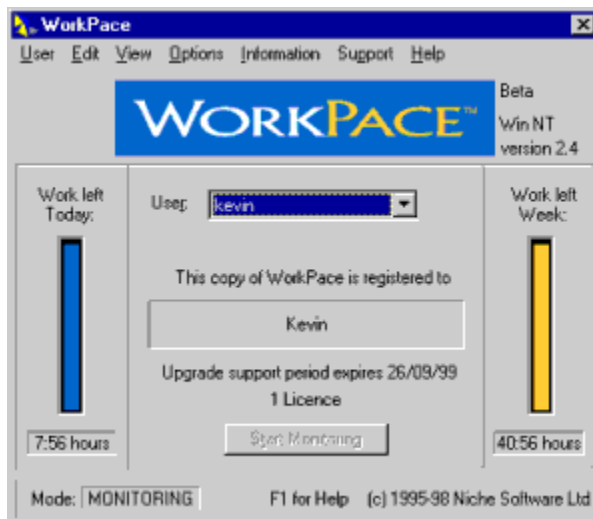
Experts studying the problem have determined that the most complete answer involves four points.

1. Correct ergonomic setup of your workspace
2. Good working technique - including good posture and correct typing and mouse technique
3. Regular stretching and relaxation exercises
4. Good working habits with regular breaks and not working too fast or too long

The first three points are discussed in detail in the sections "setting up your work area" and "RSI and its prevention".

The fourth point is one whose importance is often overlooked. Regular breaks and a controlled work rate are needed to allow the muscles to recover and prevent them from becoming over worked. The working regime recommended by experts consists of very brief breaks of a few seconds every few minutes (micropauses), and time away from the computer at least every hour (rest breaks). This regime of breaks and limits is usually difficult to follow reliably under normal working conditions.

The solution is to use *WorkPace*, a computer package that continuously monitors your working habits.



*WorkPace exercise window*

WorkPace helps you to *pace* your *work* in accordance with experts' recommendations (see the WorkPace Website for more details). WorkPace suggests the best times for taking breaks and warns when the recommended typing speed or usage times have been exceeded.

The suggestions and warning messages WorkPace provides are given with small, unobtrusive pop-up warnings that appear on your screen. These windows are only suggestions for you to take a break and do not force you to stop immediately. You have plenty of time to finish a sentence, save your work or start a calculation, while WorkPace waits patiently until you are ready to take a break.

However, if you ignore the warnings you can set up WorkPace to eventually force a break, making sure that you do follow your regime.

WorkPace can be customised in accordance with the type of work you do, the way you use your computer, your past history with OOS, and even your own personality! WorkPace is smart enough to realise when breaks are necessary by taking into account the time you actively spend using the computer, as well as the times you are away from the computer. Rest breaks may be automatically aligned with your natural daily breaks, such as lunchtime and tea breaks, avoiding unnecessary wasting of time. WorkPace also provides onscreen exercises and stretches for you to follow. These are designed to relax the muscles most commonly overworked during computer use.

WorkPace provides many other features including recording usage statistics (a continuous log that is kept of all your activity on the computer), special facilities for setting up many users on a network, and a comprehensive online help system.

Overall WorkPace is a sophisticated tool, designed to help you maintain safe and comfortable working habits. WorkPace is intended to help you follow the working regimes recommended by experts, with as little disruption to your work as possible.

# Installation

WorkPace 32-bit for Windows is installed off several 3.5-inch floppy disks, or the CD-ROM included in the WorkPace package. WorkPace can also be downloaded from the [WorkPace Website](#) . Bundled with WorkPace for Windows is a copy of WorkPace for DOS (for more information on installing WorkPace for DOS see the menu **Help / WorkPace for DOS** ).

Before you install WorkPace 32-bit for Windows ensure that your computer meets the [system requirements](#).

The WorkPace installation Wizard will take you through all the steps required to install and setup WorkPace on your computer or network.

[System requirements](#)

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## System requirements

To install WorkPace 32-bit for Windows your computer must meet the minimum hardware and software requirements.

- Any IBM compatible machine with an 80486 processor or higher
- 8 Megabytes of RAM
- A hard disk with a minimum of 4 Megabytes available space for a full installation
- A 3.5 inch disk drive (or CD-ROM drive for CD-ROM version of WorkPace)
- Windows 95, NT, 98, or OS/2

WorkPace may not run properly if your computer does not meet these requirements. **Note:** The system requirements for WorkPace for DOS are different (see *WorkPace for DOS Help*). If you have Windows 3.1 there is a 16-bit version of WorkPace available - please contact your Reseller for details, or visit our Website [www.workpace.com](http://www.workpace.com).

## Installing WorkPace from floppy disk

If your copy of WorkPace is on several 3.5" floppy disks then follow these instructions.

Insert *Disk 1* into the 3.5 inch disk drive (normally **A:**)

2. From the **Start** menu (bottom left corner of screen) select **R**un
3. Type in *A:WPSetup* and press Enter
4. Press **Setup**
5. When prompted insert *Disk 2*
5. See section "*Registration and Installing*" for further instructions

## Installing WorkPace from CD-ROM

If your copy of WorkPace is on CD-ROM then follow these instructions.

1. Insert the *WorkPace CD-ROM* into your CD-ROM Drive
2. Wait a short while and the WorkPace installation program should run automatically with a window appearing on your screen. If the installation program does not run automatically, then you can run it manually by starting *SETUP.EXE* on the CD. Select **Run** from the Windows **Start** menu and type in *CD\_Drive:Setup* (where *CD\_Drive:* is the Drive name for your CD-ROM e.g. *D:Setup*).
3. Follow the instructions on screen. See section "*Registration and Installing*" for further information on installing

## Installing WorkPace after download from the Web

If you have downloaded your copy, or a new version of WorkPace from the Internet you will not have a floppy disk or CD to install from. The file you download will either be a 'zip file' (e.g. *workpace.zip*, *workp1\_a.zip*), or a 'self-extracting executable' (e.g. *wpsetup.exe*).

### Installing a zip file

This file is compressed and to install you will need a copy of *Pkunzip*, *Winzip*, etc. installed on your computer.

1. Create a temporary directory e.g. *C:\lwptemp*
2. Use your unzip software to 'unzip' the WorkPace zip file contents into this temporary directory
3. Run the file *Setup.exe* in this directory
4. See section "*Registration and Installing*" for further instructions
5. After successful installation you can delete the contents of the temporary directory

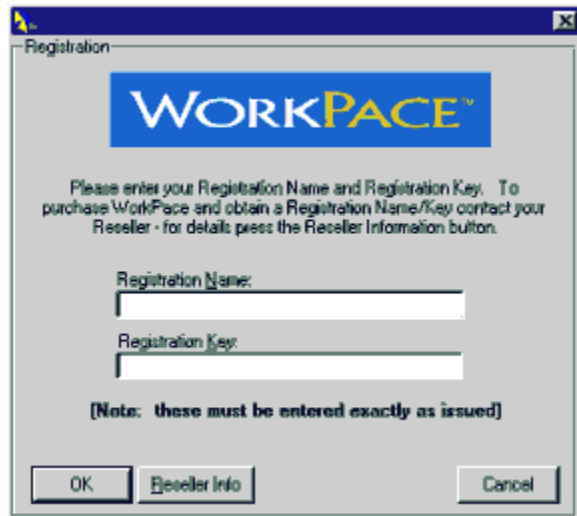
### Installing a self-extracting executable

1. Simply run (double click) on the file *Wpsetup.exe*
2. Press **Setup**
3. See section "*Registration and Installing*" for further instructions



## Registration and Installing

Once the installation program has started you will be asked to close any other programs running on the computer (as a precautionary measure). The window below will appear, asking for your *Registration Name* and *Registration Key*.

A screenshot of a Windows-style dialog box titled "Registration". At the top is the "WORKSPACE" logo in a blue box. Below the logo, text reads: "Please enter your Registration Name and Registration Key. To purchase WorkSpace and obtain a Registration Name/Key contact your Reseller - for details press the Reseller Information button." There are two text input fields: "Registration Name:" and "Registration Key:". Below these fields, a note in parentheses states: "(Note: these must be entered exactly as issued)". At the bottom of the dialog are three buttons: "OK", "Reseller Info", and "Cancel".

If you have purchased WorkSpace you will have received these registration details. They will either be on your licence agreement sent with the WorkSpace package or, if you have purchased WorkSpace through the Internet, they will have been sent by email or fax.

Enter your *Registration Name* and *Registration Key* **exactly** as they were given to you. An example of these is shown below:

Registration Name:     Bill's Big Company Ltd  
Registration Key:        3H9N-7D0Z-5LFS-NPC5

If you have not purchased WorkSpace and do not have any valid Registration details you can still trial WorkSpace. To do this press the **Trial** button. This gives you access to the full functionality of WorkSpace for 30 days.

If you have a previous installation of WorkSpace you will be asked if you would like to upgrade/reinstall WorkSpace. Note that this will automatically preserve all user setup information.

Now follow the on screen installation instructions. For help at anytime you can press **F1**.

WorkSpace can be installed locally on the computer, or setup to use the network. For an explanation of the details of installation and the options available see the sections "[Stand-alone installation](#)" and "[Network installation](#)".

## Trialing WorkPace

If you have not purchased a registered version of WorkPace you are still able to install and trial WorkPace for one month. After this trial period has ended your WorkPace Trial will expire and will no longer run.

If you believe that one month has not been enough time to properly assess WorkPace (or your trial has somehow expired early) you can obtain a *Trial Extension Key*. Note that once a trial has expired reinstalling WorkPace will *not* extend your trial period.

To obtain a trial extension you will first need to supply a *Trial Code* from your copy of WorkPace. To find this code look under the **Order Info / Enter Trial Extension Key** menu. You should find a code of the form **A73983-1558-002**. You will need to send this Trial Code to your reseller (see menu **Order Info / Contact Information**) to obtain a matching Trial Extension Key of the form **7867-9358-0607-884**.

Normally a Trial extension is given only upon the receipt of an order to allow you to continue using WorkPace whilst your order is processed. Limited trial extensions may also be given under other circumstances at the discretion of your Reseller.

## Stand-alone installation

Stand-alone installation (*just on this computer*) is the simplest installation and installs WorkPace onto the local hard drive of your computer.

On completion you are asked if you would like WorkPace to be added to the **startup** directory. If you press **Yes**, (recommended), WorkPace will run automatically every time you turn on or reset your computer. If you would like to change this setting in the future, simply choose the WorkPace menu **Options / Startup**.

## Network Installation

If your organisation has its computers connected via a network to a server there is a range of options available for automating the installation of WorkPace and the creation of user setup files. There are also options for deciding where to place these files.

The WorkPace installation Wizard will take you through network installation step-by-step. This information here explains the background to a network installation and should hopefully assist you in better understanding what the installation Wizard is trying to achieve.

**Note:** It is recommended that only those with expert knowledge on computers and networks carry out a network installation.

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WorkPace can be divided into two parts:

- [The WorkPace user setup files](#)
- [The WorkPace application files](#)

These will be discussed separately.

### [The WorkPace user setup files](#)

[Option 1: User setup files in common central network directory](#)

[Option 2: Storage of the user setup file in each user's network directory.](#)

[Option 3: Storage of the user setup files on the local hard drive](#)

[Option 4: Storage of user setup files in Windows system directory](#)

[How User pointer files work](#)

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### [The WorkPace Application Files](#)

[Standard installation](#)

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## The WorkPace user setup files

Each person running WorkPace has their own personal *user setup file*. This file contains (i) the user's name/department, (ii) their chosen WorkPace settings, (iii) the current breaks status, and (iv) recorded usage statistics, which includes a record of each day's breaks settings. An entire year of monitoring data is stored in the user setup file, which is a maximum of around 40 KB in size. The monitoring data is stored as a 'sliding window' containing the last 12 months. When the end of the first 12 months is reached the oldest data is simply overwritten by the new data. All the information in the user setup file is stored in an encrypted format and cannot be viewed simply by loading it into a text editor. This ensures security and privacy of the information.

The user setup files may be stored locally, or on the network. When stored on the network they can all be placed into a common central directory on the server. This approach can allow the System Administrator to access and maintain all the user setup files in one location. It also means that the user can log onto any computer and have WorkPace run with their correct setup automatically. This approach for installing WorkPace is strongly recommended as the best option when WorkPace is to be used with many computer users across a networked organisation. See Option 1 for more information on this.

When the user setup files are stored locally, which is the only option available for "Stand-alone installation", it is normally possible to set up several users on the one computer. This means that if more than one person uses the same computer they must each create a new setup and change to this setup manually each time they sit down at the computer. To ensure security they can add a password to the setup, thus preventing other people from accessing their user setup file.

When the user setup files are stored on the network such password protection is unnecessary, as it is possible to verify the user by their network login. WorkPace thus relies on the user's login to tell it who the current user is. As a result when a particular person has logged in to the computer, and the network, they have access to only their setup and no one else's. It is not possible for them to add, delete, or change users. Under this scenario it is only the System Administrator (through the System Administrator login) who can add or delete users.

Overall the options available for storing the user setup files under a network installation are:

**Option 1:** In a common central network directory on the server (the recommended option)

**Option 2:** In each user's mapped network drive/directory (e.g. F:\)

**Option 3:** Locally in the computer's application drive

**Option 4:** In the Windows system directory (aimed at diskless computers that run Windows off the network)

Each of these different options, including their advantages and disadvantages, is explained in later sections.

How User pointer files work

General notes on network installation

Creating user setup files

## Option 1 : User setup files in common central network directory

This is the recommended option for computers on a network. It has the advantages of:

- Central access and maintenance of all user setup files
- WorkPace Reports can be used to easily query multiple user setup files
- Easy backup of user setup files (see "[General Notes](#)")

It has the further advantages for the user of:

- WorkPace will run automatically with the correct user setup file for each user
- No one has access, from within WorkPace, to any other user setup files aside from their own
- Users effectively have a roaming setup -- they can log onto any computer on the network and have their personal setup information automatically available

To use the central storage option it is required that:

- There be a common central directory on the server that is accessible to all users
- This central directory must have read and write access for all users
- Each user must log on to the network with a unique *Username* before WorkPace is started

WorkPace uses the WinAPI call *GetUserName* to determine the currently logged on user on the computer. This relies on the user being required to enter a password and username in Windows before using the computer. Under Windows NT this always occurs, however under Windows 95 / 98 it is not guaranteed (e.g. the user's network login may occur as part of a Novell logon script before Windows is started). For a network where *GetUserName* is not guaranteed to supply the correct username an alternative approach using [user pointer files](#) is available. For this method there are the further requirements of:

- Each user must have their own network directory i.e. a directory on the network server that contains their personal files.
- For every user these user network directories must be mapped upon logon to a common drive name e.g. F:

This arrangement is a common one for many networks, giving each user their own network drive (e.g. J:) that contains their own personal files, but preventing them from accessing any other user's files. As an example, under Novell the network logon script might contain the following text

*Map J: = \\Server\Users\%Username*

Where, for example, *%Username* = *taylork03* for user Kevin Taylor, and *moorem01* for Mary Moore.

When using the network to store user setup files the name of the setup file (*\*.usr*) is automatically the same as the *Username*, hence the need for usernames to be unique. Thus, for the above examples the centrally stored user setup files would be called

*taylork03 usr*

*moorem01 usr*

For a more detailed explanation of user setup files and user pointer files see "[How User Pointer Files Work](#)".

Under the central storage option the user setup files are accessible by all users. However, they are encrypted and require a special ID code to access, thus maintaining security. No one can access or modify information in any user setup file other than their own (and even this file can be locked to prevent modification by the user - see "[Lock Modes](#)").

## **Option 2 : Storage of the user setup file in each user's network directory.**

This option has some of the advantages of the central user directory Option 1 .

- WorkPace will run automatically with the correct user setup file for each user
- No one has access, from within WorkPace, to any other user setup files aside from their own
- Users effectively have a roaming setup -- they can log onto any computer on the network and have their personal setup information available

It has the disadvantage of not allowing easy central maintenance of user setup files. As with the user pointer file system this option requires that:

- Each user must have their own network directory i.e. a directory on the network server that contains their personal files
- These user network directories must be mapped upon logon to a common drive name e.g. F:

See Option 1 for more information on user directory mapping requirements.

Each user's user setup file is thus now stored in their personal directory on the server. When they log on to a computer this user setup file will thus be automatically accessible. This is thus similar to the user pointer file option, but the personal mapped drive now contains the actual user setup file instead of a pointer file pointing to the central directory. The user setup file will be placed into a sub-directory *WorkPace\User*. For example, if *F:* is the mapped user drive the user setup file will be placed into the directory *F:\WorkPace\User*

### **Option 3: Storage of the user setup files on the local hard drive**

In this case the user setup files are not stored on the network but instead are stored locally under the WorkPace application directory on the local hard drive. The path for user setup files will thus most commonly be:

*C:\Program files\WorkPace\User*

The advantages of Option 3 are:

- Does not require mapped user drives
- Does not require that the user logon to the computer before running or using WorkPace
- Can have multiple users set up on a particular computer

The disadvantages are:

- User setup files and information cannot all be accessed from one place -- you must instead go to each computer to change settings or view monitoring data
- User cannot have a roaming setup i.e. if they use a different computer they will have to create a separate WorkPace setup on that computer



#### **Option 4: Storage of user setup files in Windows system directory**

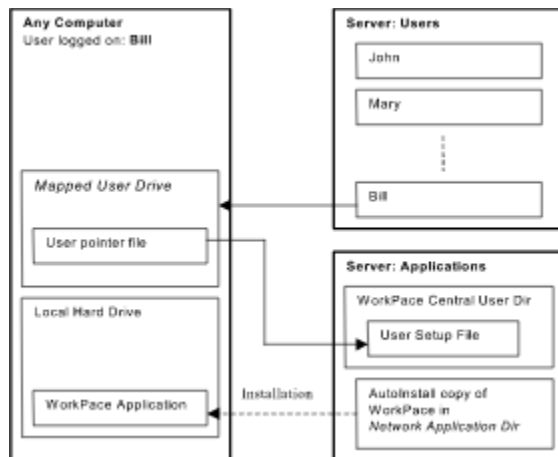
This option is primarily aimed at organisations who use diskless (no hard disk drive) computers. In this case Windows will be run from the network drive with each user, upon login, having their own Windows directory. The WorkPace user setup files are thus stored in the user's Windows directory on the network.

This method is somewhat similar to Option 2 (storage in user's personal network directories) in its operation and offers the same advantages and disadvantages.

Note that this option will behave differently if Windows is in fact run from the local hard drive instead of the network. In this case it will operate identically to Option 3.

## How User pointer files work

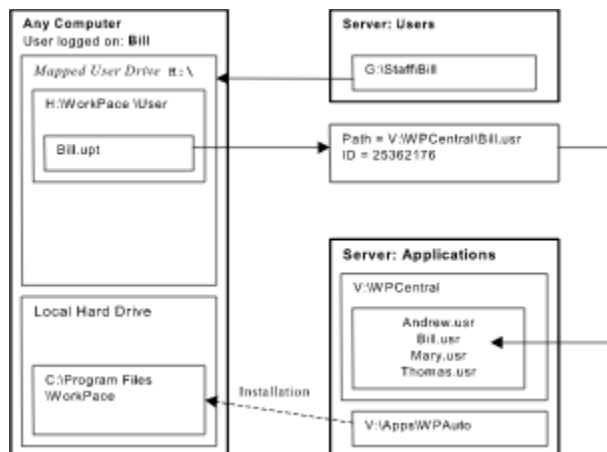
The two diagrams below illustrate how User files are stored and referenced for the central network installation of WorkPace. The second diagram shows some example paths and filenames.



*Illustration of the relationship between User pointer and User files*

When WorkPace is run the software will look in *WorkPace.ini* for the **UserPath** key (see "*WorkPace.ini*") specifying the mapped user drive and path in which to find the user's user pointer file. For example if *H:* is the mapped user drive for this network then the **UserPath** is likely to be *H:\WorkPace\User*. In this directory there will be a user pointer file e.g. *Bill.upt*, that specifies the correct WorkPace user setup file stored in the central directory on the server e.g. *V:\WPCentral\Bill.usr*. The user pointer file also contains an ID that must match an encoded ID in the user setup file. This prevents anyone from changing their \*.upt file to gain access to another user's setup.

After finding the correct user setup file and verifying the ID WorkPace will now load this user file and start. The dotted line from **Server: Applications** to the Local Hard Drive simply indicates a possible AutoInstall of WorkPace.



*Example path and filenames used in central installation of WorkPace*

## General notes on network installation

**Multiple Logins:** It is advised that users running WorkPace do not use multiple login's (i.e. login and run WorkPace on several computers concurrently with the same username). Multiple logins will not cause any major problems, but may result in the loss of any monitoring data recorded or setup changes made whilst the multiple logins are current. This problem arises when multiple instances of WorkPace are accessing the same user setup file.

**Backup of User Setup Files:** If retainment of the recorded usage statistics (up to 12 months is kept in each user setup file) is a priority it is advised that regular backups be made of the user setup files. Although unlikely, it is possible due to a random computer crash or software error for user setup files to become corrupted, causing them to generate an error upon loading. In this case the recorded monitoring data may become inaccessible and having a backup will avoid the potential loss of up to 12 months of monitoring data. It could also protect against deliberate tampering or deletion of the information (although precautions are in place to prevent this).

**File Access Privileges:** It is advised the users are given read / write access to user setup files, but not delete privileges.

## **Creating user setup files**

There are a range of methods for creating user setup files, depending upon whether you want them to be created by the user, automatically by WorkPace, or want to create them for each individual yourself.

Letting users create their setup files with use of the Setup Wizard

Creation of user setup files by the system administrator

AutoSetup

### **Letting users create their setup files with use of the Setup Wizard**

This is the default option. When WorkPace runs for the first time on a user's computer (or for the first time under their login) the user will automatically be asked to create a new user setup file and run the Setup Wizard. The name of the user setup file that is created will be the username of the currently logged in user, obtained through the WinAPI call *GetUserName*. For example if the username is *johnb032* then the user setup file will be called *johnb032.usr*. If the username information is not available, or is invalid then WorkPace will automatically create a name for the user setup file based upon the user's first name. If a user setup file with the same name already exists then a unique filename will be created (e.g. if *johnb032.usr* already exists then the new user setup file will be *johnb033.usr*). Note that the System Administrator has no direct control over the names of user setup files under this approach.

All the above naming methods for user setup files can be overridden by the use of a special file called *WorkPace.set* that can be placed into each user's mapped network directory containing the required name for each user's setup file. The *WorkPace.set* file should contain something of the form:

*UserSetupFileName = JohnSmith03*

Where *JohnSmith03.usr* is the resulting name of the user setup file.

### **Creation of user setup files by the system administrator**

The System Administrator can create a ready setup for a user. This might be done to create a special rehabilitation/recovery setup for a user suffering from RSI/OOS, or in order to control the user's setup and lock it so that it cannot be changed (see "Lock Mode"). The simplest way for the System Administrator to create a setup for the user is simply to go to the user's computer, or login as the user, and then Create/Delete and Edit user setups as per normal. If user setup files are stored centrally (Option 1) then any user's setup can be created from just the one computer without having to logon as each user. Follow the instructions below (or see section "System Administrator Mode").

#### *Setup by the System Administrator (through Sys Admin Login)*

1. Run WorkPace (from server or wherever)
2. Login as System Administrator (**Edit/Sys Admin**)
3. From the main WorkPace window select **Sys Admin/User Directory**
4. Change to the User's home directory e.g. `\\Server\Users\taylor_k` where this is normally mapped to, say, `J:\`
5. Press Create `..\workpace\user`
6. Press OK
7. Now you can create a **New User**, **Delete a User** etc. Make sure when changing any setup parameters that the correct User is shown in the main window (*User:*)
8. Apply **Locking** if required via the **SysAdmin/User Settings** menu (or change **Global Settings**)
9. If user pointer files are being used (see Option 1 ) then to avoid confusion (especially if any locking is being used), it is best to ensure only one `.upt` file exists in each User directory
10. If (i) you are using Sys Admin mode whilst logged in as a User, and (ii) Lock 1 or 2 is applied, then make sure you have the correct User name selected in main window before you log out of Sys Admin mode
11. Log out of System Admin mode (**Sys Admin/Logout**)

The new setup files you have created will automatically be placed in the Central User Directory you specified during installation (e.g. `netdrive:\wpusers` as `*.usr` files).

## AutoSetup

The *AutoSetup* feature allows you to specify an initial setup for users. It has the advantages of:

- Initial setup of each User can be controlled
- User setup can be locked automatically if required i.e. User will not be allowed to change their setup

This is particularly useful for rolling out WorkPace in a large organisation where you want to specify a particular setup for users instead of allowing them to choose their own (see "[Example WorkPace Settings](#)" for some example settings useful for this). For example, you may wish to ensure that all users take a 5 second micropause every 5 minutes, and a 5 minute rest break every hour instead of letting them choose their own settings. The AutoSetup is also useful if you want to lock users into a particular group of settings. If an organisation has determined that there is a set of mandatory requirements that must be enforced on all computer users then this can be achieved by choosing an AutoSetup that meets these requirements, and choosing to apply a global lock option during the WorkPace Installation or [AutoInstall](#) setup. This means that once each user setup file has been created with the chosen initial settings then only the System Administrator will be able to change them further.

Alternatively user setups can be locked at any later date, either globally or on an individual basis (see "[System Administrator Mode](#)").

AutoSetup can only be used with the central user setup file storage option ([Option 1](#) )

The process for AutoSetup is:

1. Install WorkPace (standard installation or [AutoInstall](#)).
2. Select the desired lock option for user setup files
3. Choose AutoSetup option for initial user setup
4. Choose a name for the AutoSetup user setup file (e.g. *General.usr*)
5. Finish installation (or AutoInstall setup)
6. Run WorkPace and create a user setup file containing the desired settings (see "[Example WorkPace Settings](#)" for some examples)
7. Close WorkPace and copy the created user setup file to the central user directory. Rename it with the chosen name (i.e. *General.usr*).

The information you choose is stored in the [sysadmin.ini](#) in the central userfile directory under the settings *InitialSetup* and *InitialSetupFile*.

If mapped user drives are being used (i.e. [Option 2](#), or [Option 1](#) with user pointer files) it is also possible to place this information into the [WorkPace.set](#) file. Any settings in the [WorkPace.set](#) file will override those in the [sysadmin.ini](#) file. Using this it is possible to do an AutoSetup regime with different initial setups for different groups of users.

**Note:** You cannot create user setup files for multiple users simply by copying and renaming a single file. Each user setup file is encoded with a unique ID and must have been created by WorkPace to ensure that this ID is valid.

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## The WorkPace Application Files

For the 32-bit version of WorkPace it is a requirement of Windows that the application files be registered locally (in the Windows registry). The best way to achieve this, and also minimise network traffic, is to install the WorkPace application files locally -- on each computer's hard disk. Thus, whether the user setup files are stored centrally, on the network, or locally, the WorkPace application files should always be installed locally on each PC. Note that it is not necessary to restart the computer after installation of WorkPace.

WorkPace can either be installed directly on each PC, or for large networks you can take advantage of the WorkPace AutoInstall.

Many of the options you choose during installation are stored in the sysadmin.ini. The location in which this file is placed depends upon the user setup file storage option.

User setup file storage option	Location of <i>sysadmin.ini</i>
Option 1 -- central network directory	In central network directory e.g. V:\WPUsers
Options 2,3,4 -- non-central	In local WorkPace application directory e.g. C:\Program Files\WorkPace

(See "The WorkPace user setup files" for more information on user setup file storage options)

After installation the settings in the sysadmin.ini can be changed through the "System Administrator Mode", or by editing the sysadmin.ini file directly.

**Note:** Under Option 1 it is very important, for security reasons, that the *sysadmin.ini* file stored in the central directory is set to **read-only**. WorkPace does not do this automatically.

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Standard installation

AutoInstall

Troubleshooting



**Standard installation**

The standard installation places the WorkPace application files directly onto the local hard drive, usually into the directory *Program Files/WorkPace*. You will be given the option of placing WorkPace into the *Windows Startup* directory. This is recommended as it ensures that WorkPace is always run when Windows starts.

## AutoInstall

The *AutoInstall* is designed to allow automatic rollout of WorkPace to many computers on a network. The AutoInstall also allows for automatic upgrading of WorkPace. Basically a special copy of the WorkPace application files is placed onto the network in a directory accessible by all computers that WorkPace is to be installed on. Each computer then runs the program *WPAuto.exe* from this network directory. When run this program will do one of several things.

1. If no previous installation of WorkPace exists on the computer *WPAuto.exe* will automatically install WorkPace according to the options in the file *WPAuto.ini*. The *WPAuto.ini* is created during installation/setup of the AutoInstall. After successful installation, the newly installed version of WorkPace is then run. Thus, from the users point of view running *WPAuto.exe* simply has the appearance of running WorkPace on the computer for the first time.
2. If WorkPace is already installed then *WPAuto.exe* will simply run the locally installed copy of WorkPace. Thus, running *WPAuto.exe* is effectively equivalent to just running *WorkPace.exe* directly.
3. If WorkPace is already installed but is an older version (or an earlier installation copy) then the AutoInstall will automatically reinstall/upgrade WorkPace. Any existing user setup information will be retained. From the user's point of view the upgrading/re-installing will be fairly transparent -- the new version of WorkPace will just appear to run as usual with their normal setup.

### Setting up the AutoInstall during WorkPace installation

If you choose the AutoInstall option when installing WorkPace you will be asked a number of questions concerning

- The installation directory for WorkPace on the computers
- How the user's initial setup should be created (Setup Wizard / Default / Auto Setup)
- Whether to record usage statistics
- Whether to allow users to view their personal usage statistics/monitoring data
- Auto save settings
- Error message and logging options
- System administrator password
- Startup directory options

The answers you give to these questions are placed into *WPAuto.ini*, and can be later edited directly. As with the standard installation the AutoInstall will give you the option of placing WorkPace into the Windows startup directory on each computer. An alternative option (the recommended one) is to place a shortcut to *WPAuto.exe* into the startup directory. The advantage of this is that it allows automatic reinstalling and upgrading of WorkPace. Under normal circumstances, as explained earlier, this will be identical to running WorkPace directly.

## Troubleshooting

If you are having difficulty getting the AutoSetup or AutoInstall to work the explanation of the WorkPace software logic given below may help you.

AutoInstall

AutoSetup - using WorkPace.set and user pointer files

AutoSetup - using Windows username

## AutoInstall

**Assumptions:** After user logon the AutoInstall executable (*WPAuto.exe*) on the network is run (either from the user's startup directory, or as part of a startup script).

1. *AutoInstall* checks the registry (*HKEY\_LOCAL\_MACHINE/Software/Niche Software/WorkPace/Version*) to see if this version of WorkPace is currently installed on the computer
2. If this version has already been installed then the Registry *InstallDate* (*HKEY\_LOCAL\_MACHINE/Software/Niche Software/WorkPace/Version*) for this version is compared with the *InstallDate* in *WPAuto.ini* (this indicates when the *AutoInstall* files were last updated). If the AutoInstall is more recent than this version of WorkPace is reinstalled on the computer. Any user setup files/user settings are preserved
3. If the AutoInstall version is not already on the computer then previous versions are checked for. If none are found then WorkPace is installed according to the settings in *WPAuto.ini*.
4. If a previous version is already on the computer then this is upgraded to the new version according to the settings in *WPAuto.ini* (and preserving all user setup file information)
5. After all of the above have been checked the locally installed WorkPace executable is run

## AutoSetup - using WorkPace.set and user pointer files

**Assumptions:** Central storage of user setup files ([Option 1](#)), use of mapped user drives and user pointer files.


1. WorkPace is started (either directly by running the local executable, or by the AutoInstall program)
2. Check for an existing user pointer file (\*.upt) in the directory *Mapped\_User\_Drive:\WorkPace\User*. If a valid user pointer file exists WorkPace will compare the user pointer file ID with the encoded ID contained in the user setup file (\*.usr) specified by the user pointer file. (See "[How User pointer files work](#)" for more information)
3. If the IDs do not match then an error message is generated (and logged to the error log), and WorkPace will run with the Anonymous user
4. If the IDs do match then WorkPace will run using the user setup file that was specified by the user pointer file
5. If no user pointer file exists WorkPace will check for the existence of the file *Mapped\_User\_Drive\WorkPace.set*. If this file exists and has valid contents (i.e. it contains a definition for *UserSetupFileName* for the user - see "[AutoSetup](#)" for more information) then WorkPace will check in the central user directory for a pre-existing file of this name
6. If a user setup file already exists with this name then WorkPace will generate an error saying that the user pointer file cannot be found. If this error occurs, meaning that the user pointer file has somehow been deleted, the system administrator will need to recreate the user pointer file. To find the correct ID you'll need recreate the user pointer file placing into it the correct ID for that user. To find the correct ID (i) login to WorkPace as system administrator, (ii) change to the correct user directory if not there already (use **Sys Admin / User Directory**), (iii) choose the correct user from the main window pulldown list, (iv) select **Sys Admin / User Settings**. The easiest way to recreate the user pointer file is to copy one from another user. You will then need to change its name to that of the user (e.g. *Bill.upt*), change the *ID* and the *Path*.
7. If a user setup file does not exist then WorkPace will first check the *WorkPace.set* file for the definitions *InitialSetup* and *InitialSetupFile*
8. If these are not defined in the WorkPace.set then the definitions given in *sysadmin.ini* will be used
9. If *InitialSetup* is set to *SetupWizard* then the user will be prompted to create a new setup using the Setup Wizard. Their new setup is then saved in the central directory with the name specified in the *Mapped\_User\_Drive\WorkPace.set*
10. If *InitialSetup* is set to *File* then the file specified by *InitialSetupFile* will be copied and used as the initial setup for the user

## AutoSetup - using Windows username

**Assumptions:** Central storage of user setup files (Option 1), Windows username option chosen

1. WorkPace is started (either directly by running the local executable, or by the AutoInstall)
2. The WinAPI function *GetUserName* is used to obtain the Username of the currently logged in user
3. The central user directory is checked for a user setup file with the name *Username.usr*
4. If the user setup file exists then WorkPace runs as per normal with this setup file
5. If the user setup file does not already exist then WorkPace will check the centrally stored sysadmin.ini for the variable *InitialSetup*
6. If *InitialSetup* is set to *SetupWizard* then the user will be prompted to create a new setup using the Setup Wizard. This new setup is then saved in the central directory as *Username.usr*
7. If *InitialSetup* is set to *File*. Then the file specified by *InitialSetupFile* will be copied to *Username.usr* and used as the initial setup for the user

## Running WorkPace


If, during installation, you chose to have WorkPace put into your Windows Startup directory then WorkPace will run automatically when you start Windows. To add or remove WorkPace from the Startup directory you can use the **Option** Menu from the main WorkPace window (double click on WorkPace icon  in System.Tray). To run WorkPace manually:

1. Press **Start** on the Windows menu bar
2. Select **Programs**
3. Select **WorkPace**
4. Choose the WorkPace icon

WorkPace will take a few seconds to start (**Note:** WorkPace may not be accessible from the Start menu).

## Quitting WorkPace

You may exit WorkPace by selecting **Exit** from the System Tray Menu.

1. Press right mouse button over the WorkPace Icon  in the System Tray (in bottom right hand corner of Window task bar)
  2. Select **Exit**
- If want WorkPace to stop monitoring without quitting the program you can put it on standby (see "Putting WorkPace on standby").

**Note:** If WorkPace has been set on Lock 1 or Lock 2 the exit (and standby) option will be disabled i.e. WorkPace will be locked in running mode. For more information on Locking WorkPace see "System Administrator Mode".

---



## Uninstalling WorkPace

WorkPace can be uninstalled either by:

1. Running the WorkPace uninstall. Select **Start Menu / Programs / WorkPace / Uninstall**,  
OR
2. Use the Windows Add\Remove Programs. Select **Start Menu / Settings / Control Panel**.


Double-click on the Add\Remove Programs icon



3. Select WorkPace from the list, Press **OK**.

# Setting up WorkPace

WorkPace can keep the setup of many users (up to many thousands). Each user can choose the parameters that best suit their needs, or alternatively they can be chosen for the user - see "[Network Installation Auto Setup](#)" or, "[System Administrator Mode](#)". Under normal circumstances when WorkPace runs for the first time you will automatically be prompted to create a new user. If this does not occur, or you wish to add another user then:

1. Double click on the WorkPace icon  (in the Windows System Tray - which is normally in the bottom right hand corner of your screen as part of the Window Task Bar)
  2. Select **User / New**
  3. Either use the Setup Wizard (see below) to choose your settings, or edit them manually (see "[Using General Presets](#)", and "[Advanced Setup](#)")
  4. For more detail on adding a new user see "[Adding a New User](#)"
- Once you have been using WorkPace for a while you may wish to fine-tune your setup further. For details on doing this see "[Fine Tuning WorkPace](#)".

[The Setup Wizard](#)

[Adding a new user](#)

[Changing your setup](#)

[Using general presets](#)

[Using group presets](#)

[Advanced setup](#)

[Options window](#)

[Miscellaneous](#)

[User Passwords](#)

## The Setup Wizard

The *Setup Wizard* asks you a series of questions about your working habits and then decides on a setup that should be suitable for you. This can then be modified using any of the other setup methods. The *Setup Wizard* can be used to remake an existing setup, or to create a new one. Whenever you use the *Setup Wizard* your entire previous setup will be changed.

**Note:** Although the Setup Wizard makes a good effort at estimating the correct setup parameters it is not perfect, and the setup parameters will often still require fine tuning by the user (see "*Fine Tuning WorkPace*").

---

### Using the Setup Wizard

Read and answer the questions that appear on the screen. Where appropriate select the right options

Choose **Back** to go to the previous question and change some answers, choose **Next** to go to the next question


When you have answered all questions choose **Finish**, and you will be prompted with a window. Choose **Yes** to generate a setup from your answers, **No** to quit the setup Wizard, or **Cancel** to return to the setup wizard to change your answers

**Note:** It is recommended that you look at the section on "*Using WorkPace*" before pressing the **Start Monitoring** button.

---

## Adding a new user

To *add a new user* make sure that WorkPace is in standby mode. From the menu bar:

1. Bring up the main WordPace window by double clicking on the WorkPace icon  (in the Windows System Tray - which is normally in the bottom right hand corner of your screen as part of the Window Task Bar)
2. Select **User / New** (this is done for you automatically the first time you run WorkPace). You will be asked if you wish to use "The Setup Wizard"
3. If you choose **Yes** see "The Setup Wizard" for more information. If you choose **No** a dialog box will appear.
4. Type in your name
5. Choose a pre-defined general setup from the pull-down list. (see the section "Using general presets" for more information)
6. Choose **OK**
7. Close the main WorkPace windows (Alt-F4 or press the Close button on the top right hand corner of the window)

You have now created a new user and WorkPace is ready to start, however you may want to modify your setup first. For ideas on how to do this see "Changing your setup". You can also create a password to protect your setup information and prevent other people using the computer while WorkPace is monitoring under your name. See the section "Passwords" for more information.

## Changing your setup

Ideally the same working regime would be suitable for all people, however in practice there are many differences between computer users. Your correct WorkPace setup is dependent on:

1. The type of work you do:
  - Data entry
  - Word Processing
  - Programming
  - CAD
2. The way you use the computer
  - All day / occasionally
  - For long periods / intermittently
3. Your past history with RSI:
  - Recovering from OOS/RSI
  - Suffering some physical symptoms
  - Have never had problems
4. Even your own personality
  - Relaxed and easy going
  - Hardworking and under stress
  - Quick thinking and easily annoyed

Because of all these differences, a personalised working regime is best. This is achieved in WorkPace by changing a set of parameters that control its operation, including the times between breaks, the duration of breaks, the types of warnings, the typing speed limit, and many others.

The setup system is structured as a multi-level hierarchy, consisting of three levels of detail. The top level is the general setup which encompasses all setup information. The general setup is then divided into six groups called the group setups. These groups are the break timing, typing speed limit, warning configuration, timetable, and exercise and sound setups and control those aspects of WorkPace's operation. Each of these groups has associated with them a large number of parameters, all of which may be set individually if required. WorkPace has built into it a number of pre-defined setups (called presets) for the general setup and most of the groups. These presets allow you to setup WorkPace quickly, efficiently and accurately. A setup may also be copied from an existing user in a similar manner to selecting a preset.

There are four ways of choosing your setup:

1. **Use the Setup Wizard**. WorkPace will ask you a number of questions about your work and work history, and automatically determine an appropriate setup.
2. **Choose a pre-defined general setup (preset)**. You can choose from the range of presets, or alternatively copy and use the setup of an existing user.
3. **Choose a preset for each group of parameters**. You may choose a different preset for each of the five setup groups, or copy someone else's setup for that group.
4. **Individually set each parameter (Advanced setup)**. You may adjust each parameter to fine-tune the setup to your own needs, or to that recommended by a professional.

These methods are listed in order of complexity with 1 being the simplest and 3 being the most complicated. Depending on your experience, one method may be most appropriate.

- First time users: 1 or 2
- Changing an existing setup: 3 or 4
- Entering a setup prescribed by a professional: 3 or 4
- Fine tuning setup parameters: 4

The setup you are currently using is displayed in the setup window. This may be one of several possibilities:

1. A setup chosen by the Setup Wizard, e.g. **Setup: Setup Wizard**
2. A pre-set from the pre-set list, e.g. **Setup: 3. Secretarial**
3. A setup copied from another user, e.g. **Setup: John Smith**
4. A modified version of the above, indicated by the appearance of [modified] next to the name, e.g. **Setup: 3. Secretarial [modified]**

The modified indicator will appear if you choose a setup, then change some of the individual parameter values using the "Advanced Setup".

## Using general presets

WorkPace contains a list of general presets from which you can select.

### General Presets

Default  
Accounts/  
Database  
Copy Typing  
Data Entry  
CAD/Design  
General Work  
Programming  
Secretarial  
Recovery 4 hr  
day  
Recovery 3 hr  
day  
Recovery 2 ½ hr  
day  
Recovery 2 hr  
day  
Recovery 1 ½ hr  
day  
Recovery 1 hr  
day  
Recovery ½ hr  
day

These presets are designed for different types of computer use, from casual general work, to intensive and fast work. Included also are some created especially for those recovering from RSI (for these people it is recommended to consult a professional to determine your best settings).

## Selecting a general preset

From the main window, make sure you are the current user by selecting yourself from the pull-down menu or adding a new user.

1. Select **Edit / General**
2. Choose a preset from the **Preset** menu
3. Choose **OK**

You should choose the setup closest to your work description or type of computer usage.

## Copying a general setup from another user

From the main window, make sure you are the current user by selecting yourself from the pull-down menu or adding a new user.

1. Select **Edit / General**
2. Choses a user name from the menu **Copy User**
3. Choose **OK**

**Note:** Copying another's user's setup simply copies their *current* parameter values. If they later change their setup, yours will not be changed as well.

---

## Using group presets

The WorkPace setup parameters are divided into five separate groups.

- **Break timing**: Sets up the interval and duration of micropauses and rest breaks, as well as daily and weekly limits on computer usage
- **Exercises**: Changes the regime of exercises and stretches available, how often they are repeated and how long they are.
- **Typing speed limit**: Sets up the limit on your allowable typing speed, and the frequency of warnings
- **Warning configuration**: Changes the types of warnings WorkPace gives (e.g. sound and/or visual) and provides options for ignoring breaks, or having breaks enforced
- **Timetable**: Allows you to enter a weekly schedule of normal breaks such as lunch and tea breaks, or meeting times. WorkPace will try to align your rest breaks with breaks in the timetable
- **Sound**: You can change the sounds that indicate micropauses, rest breaks, etc.

For each of these groups you can select a preset or copy another user's setup. The presets cover a range of parameter settings, from easy to strict. They are listed in order, with the lower numbered presets producing a more lenient/easier regime, and the higher presets producing a more strict working regime. To select one of these presets read "Selecting a particular preset".

Break timing presets

Exercise presets

Typing speed presets

Warning configuration presets

Timetable presets

Selecting a particular preset

Copying a group setup from another user



## Break timing presets

The eight built-in break timing presets are shown below. They are listed in order, with the lower numbered presets producing a more lenient/easier regime.

### Break Timing

Easy

Normal  
(continuous  
use)

Normal  
(intermittent  
use)

Prevention (low)

Prevention  
(high)

Recovery (low)

Recovery  
(medium)

Recovery  
(high)

Users not suffering from RSI are recommended to select one of the first five presets, in accordance with their own preference and work situation. The last three presets are for users suffering from RSI/OOS, and are more strict. Breaks for these will be longer and more often, and there will be strict limits on daily and weekly usage of the computer.

## Exercise presets

WorkPace has several built-in exercise regimes. These regimes consist of combinations of the exercises specifically designed by an experienced physiotherapist for computer users. They include an emphasis on muscular relaxation and neural stretches. Recovery and rehabilitation regimes have more frequent exercises, and a greater emphasis on relaxation.

### **Exercise Regime**

Normal

Recurrence

Prevention

Rehabilitation

**Normal:** Intended for most computer users who have no history of RSI problems.

**Recurrence Prevention:** This is a higher-level prevention regime intended for computer users who have previously suffered problems with RSI. The regime is designed to protect against recurrence.

**Rehabilitation:** For use by people who are currently suffering from or recovering from musculoskeletal/RSI related injury.

## Typing speed presets

The eight built-in typing speed presets are shown below. They are listed in order, with the lower numbered presets producing a more lenient/easier regime.

### Typing Speed

Off

Fast

Normal (copy  
typist)

Normal (touch  
typist)

Medium speed

Recovery  
(low)

Recovery  
(medium)

Recovery  
(high)

Select the preset that most closely matches your natural typing speed.

It is recommended that you read the sections on good keyboard technique "*Correct keyboard usage*".

## Warning configuration presets

### Warning configuratio n

Sound only

Visual  
warnings

Rest break  
insist

Micropause  
insist

Insist on both

Insist on all  
(medium)

Insist on all  
(high)

Recovery  
(low)

Recovery  
(medium)

Recovery  
(high)

The ten built-in warning configuration presets are shown above. They are listed in order, with the lower numbered presets producing a more lenient/easier regime.

The warning regime is explained in detail in the section "*The WorkPace warning system*".

## Timetable presets

The five built-in timetable presets are shown below. One of the purposes of the timetable is to allow WorkPace to align rest breaks with your normal daily breaks.

### Timetable

Off

Lunch 12:00

Lunch 12:30

Lunch and tea  
breaks 12:00

Lunch and tea  
breaks 12:30

Presets numbers 2 and 3 specify a lunch time only, and presets 4 and 5 specify a lunch time and morning and afternoon tea breaks. Due to the large number of alternatives, you probably need to adjust the timetable to match your own schedule.

## Selecting a particular preset

From the main window, make sure you are the current user by selecting yourself from the pull-down menu or adding a new user.

1. Select **Edit**
2. Select the group you wish to setup, i.e. **Break Timing**, **Exercises**, **Typing Speed**, **Warning Configuration**, **Timetable**. The setup window will appear with all the setup parameters belonging to the group you have chosen
3. Select **Presets** and choose an appropriate setup. The parameter values will now change to reflect the preset. The name of the preset you have selected is displayed below the user name
4. Choose **OK**

You should choose the setup closest to your work description or computer usage method.

## Copying a group setup from another user

From the main window, make sure you are the current user by selecting yourself from the pull-down menu or adding a new user.

1. Select **Edit**
2. Select the group you wish to copy, i.e. **Break Timing**, **Exercises**, **Typing Speed**, **Warning Configuration**, **Timetable**. The setup window will appear with all the setup parameters belonging to the group you have chosen
3. Select **Copy User** and choose the user you wish to copy the group setup from. The parameter values will now change to those of the user chosen. The name of the user from whom you have copied the setup is displayed below the user name. Note that only the parameters of the group you have selected are copied from the other user. To copy the entire setup, read the section "*Copying a general setup from another user*".
4. Choose **OK**

**Note:** Copying another's user's setup simply copies their *current* parameter values. If they later change their setup, yours will not be changed as well.

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## Advanced setup

If copying another user, or choosing a preset does not produce your desired working regime, you can modify individual parameter values yourself. It is recommended that you have a few days experience using WorkPace before modifying these parameters. This will give you a better understanding and appreciation of the interrelation between the setup values and behaviour of WorkPace. It is also a good idea to observe the parameter values of the different presets.

All of the setup dialog windows share some common information, and menu options:

### **User**

Name of the user whose setup is currently being edited.

### **Setup**

The name of the **User**, or **Preset** upon which your setup is based. If the setup has been modified since, the word **[modified]** is displayed next to the setup name.

### **Menu Presets**

Allows you to select a built-in preset. See section "Selecting a particular preset" for more information.

### **Menu Copy user**

Allows you to copy the setup of another user. See section "Copying a group preset from another user" for more information.

General setup parameters

Break timing parameters

Typing speed limit parameters

Warning configuration setup parameters

Exercise setup parameters

Timetable setup parameters


Sound setup parameters



## General setup parameters

The general setup is the top level setup mechanism. It contains the user name and the file name associated with that user.

Make sure you are the current user (see "[Changing the current user](#)"), or [Add a new user](#) .

1. Double click on the WorkPace icon  (in the Windows System Tray) to display the main WorkPace window
2. Select **Edit/General**
3. Modify the input boxes: **First Name, Last Name, Department, Location**

### **First Name, Last Name**

The name of the user. This may be edited to correct any misspellings

### **Department, Location**

Optional fields to allow better distinguishing between users


### **File Name**

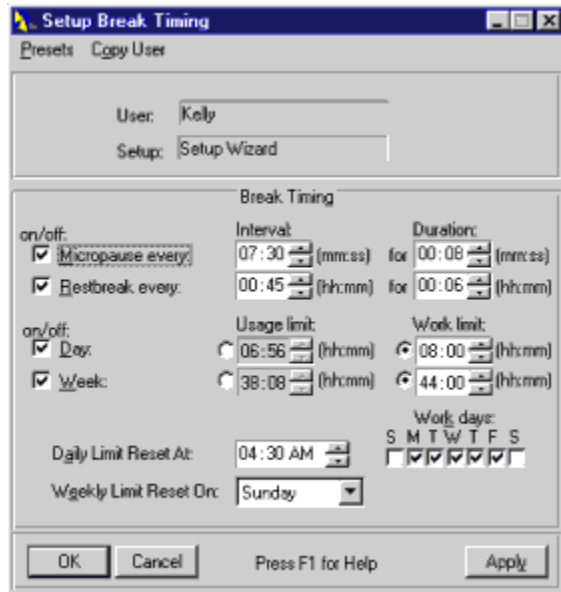
The name of the file that stores the user information. You can copy or shift your user file to a different computer using **Windows Explorer**.

## Break timing parameters

These parameters set up the interval and duration of micropauses and rest breaks, as well as the daily and weekly limits on computer usage.

Make sure you are the current user (see "[Changing the current user](#)"), or [Add a new user](#) .

1. Right click on the WorkPace icon  (in the Windows System Tray) to display the WorkPace menu
  2. Select **Edit/Break Timing**
- An example of the **Break Timing** dialog box is shown below.



*Break Timing dialog box.*

### on/off

The corresponding check boxes turn the break or limit monitoring functions on or off. If a break or limit is turned off, WorkPace does not issue warnings for that break or limit.

### Micropause interval

The computer usage time between micropauses. The range of allowed values is from 30 seconds to 10 minutes. For more information on micropauses and appropriate values see "[Using WorkPace](#)".

### Micropause duration

The duration of micropauses. This is the period of time for which you must stop using the computer after a warning has been issued. The range of allowed values is from 5 seconds to 3 minutes.

### Rest break interval

The computer usage time between rest breaks. The range of allowed values is from 5 minutes to 2 hours. For more information on rest breaks and appropriate values see "[Using WorkPace](#)".

### Rest break duration

Duration of the rest break. The range of allowed values is from 1 minute to 2 hours.

**Note:** Break intervals and usage times are based on time actively using the computer. If you stop using the keyboard and mouse for a while, WorkPace will stop counting usage time. This means that a rest break warning, for example may be given after 40 minutes, even if the rest break interval is 30 minutes. This would happen because during that 40 minutes you spent 10 minutes taking micropauses, thinking or doing another activity, meaning the actual time spent typing or using the mouse

was only 30 minutes.

---

### **Daily limit**

Specifies the limit on the computer usage in any one day. There are two ways of specifying this limit.

#### **Usage limit:**

A limit on the time spent actively using the keyboard or mouse. Concurrently, the **Work limit** box will display the expected amount of time it will take you to reach the **Usage limit**, given your current micropause and rest break settings. For example, if you take a micropause for 10 seconds every 3 minutes, and a 10 minute rest break every 50 minutes, a *usage* limit of 6 hours will give a *work* limit of 8 hours, i.e. a full working day. It is important to realise that no-one, not even the most diligent typist will be actively typing every moment of their 8 hour day. To come even close to doing so would be very detrimental to your health.

#### **Work limit:**

This should generally be the length of your working day at the computer. The **Usage limit** box will show, based upon your chosen micropause and rest break settings, the expected time you will spend actively using the keyboard or mouse. For example, if you choose a work limit of 8 hours, a 10 second micropause every 3 minutes, and a 5 minute rest break every 55 minutes, then the active usage limit will become 6 hours and 50 minutes.

**Note:** If you do not follow your set working regime, i.e. you ignore some of the breaks, you may reach the usage limit before your work day (e.g. 8 hours) is finished.

---

The **Work limit** option is only recommended for normal (non-injured) users, and people who spend most of their day on the computer. Use the option buttons to select between the **Work limit** and the **Usage limit** input boxes.

### **Weekly limits**

Operates the same as the **Daily limit**, but counts over a whole week. The definition of the start and end of the week is determined by the **Weekly Limit reset on** option.

#### **Daily limit reset at**

The time of the day at which the daily usage counter will be reset. This should be set to a time well after you normally finish work (e.g. early hours of the morning). If you work on a night shift this time may need to be in the middle of the day instead. Note that WorkPace does not need to be running for this reset event to take place.

#### **Weekly limit reset on**

The day of the week on which the weekly usage counters are reset. This should be a day on which you do not normally work, at the end of your working week (e.g. Sunday).


### **Work days**

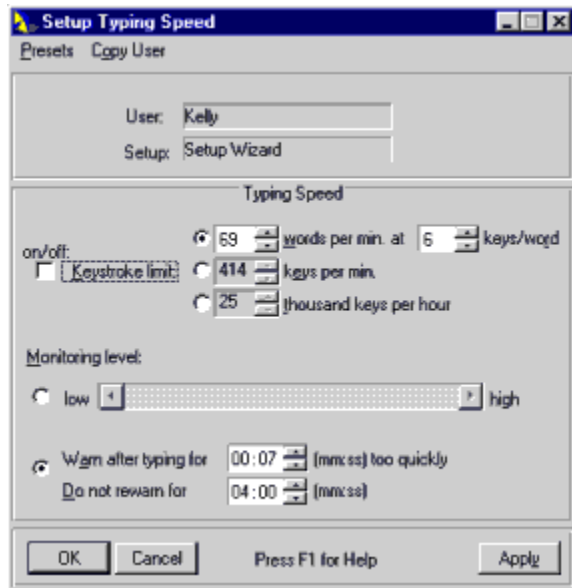
These seven check boxes, corresponding to the seven days of the week, allow you to indicate your normal weekly working days. WorkPace uses this information to dynamically adjust your daily limit to be consistent with your weekly limit setting. For example, if you work extra time on Monday and Tuesday (i.e. ignore the End-of-Day warnings), then WorkPace will reduce your work limits for the rest of the week. This way you can work extra time on some days, but still remain within your safe working limit for the week. For more explanation of the Break Timing parameters see "[Micropauses](#)", "[Rest Breaks](#)", "[Daily and Weekly Limits](#)". For information on [Finetuning](#) these parameters see "[Finetuning Micropauses](#)", "[Finetuning Rest Breaks](#)" and "[Finetuning the Daily Limit](#)".

## Typing speed limit parameters

This group of parameters controls when and how often WorkPace warns you for typing too quickly.

Make sure you are the current user (see "[Changing the current user](#)"), or [Add a new user](#) .

1. Right click on the WorkPace icon  (in the Windows System Tray) to display the WorkPace menu
  2. Select **Edit/Typing Speed limit**
- An example of the **Typing Speed** dialog box is shown below.



*Typing Speed limit dialog box.*

### **on/off**

Enable/Disable monitoring of your typing speed.

### **Keystroke limit**

The maximum typing speed measured in words per minute, keys per minute, or keys per hour. WorkPace continuously computes your instantaneous typing speed and issues a warning if the speed chosen is exceeded for more than a specified amount of time. This amount of time is determined by the **monitoring level**, described below.

### **Monitoring period ( Warn after typing for mm:ss too quickly )**

This specifies the period of time over which your typing speed is measured. If your speed is too high for longer than this time a warning will be given. For example if the monitoring period is 30 seconds, you will have to type too fast for more than 30 seconds before a warning is issued. This parameter can be increased to smooth out the effects of uneven typing, and ignore occasional bursts of extra fast typing. The allowed range for this parameter is 1 second to 5 minutes.

### **Rewarn interval ( Do not rewarn for mm:ss )**

This is the minimum amount of time before another typing speed warning can be issued by WorkPace. This prevents too many annoying warnings being given. Setting this to a high value means that you are allowed to work extra fast for a while to get something done without being continually interrupted by warnings. For example if the rewarn interval is set to 10 minutes, when a "Slow down" warning is issued another one will not appear for at least 10 minutes. People with physical symptoms or suffering from OOS/RSI should keep this value low to ensure that they do not type fast for long periods.

**Monitoring level**


The monitoring period and rewarn interval may alternately be set by use of the slider bar.

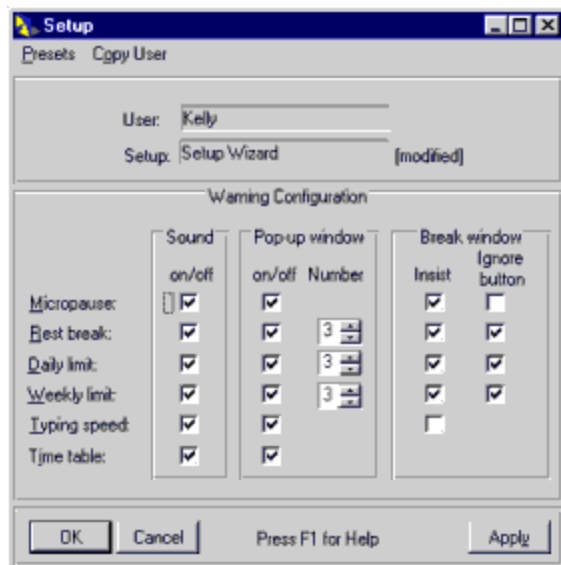
- **low:** short over-speed bursts will be ignored, and warnings will be restricted
- **high:** any over-speed typing will be detected and warnings will always be given

## Warning configuration setup parameters

The warnings configuration tells WorkPace how to warn you, how many warnings to give, and whether to allow you to ignore them. The warning for each break or limit may be either a sound, a pop-up window or both. The section "The WorkPace warning system" explains some of these options in more details. For more information see "[Using WorkPace - Typing speed](#)" or "[Finetuning the Typing speed limit](#)".

Make sure you are the current user (see "[Changing the current user](#)"), or [Add a new user](#) .

1. Right click on the WorkPace icon  (in the Windows System Tray) to display the WorkPace menu
2. Select **Edit/Warning Configuration**.  
An example dialog box is shown below:



*Warning Configuration dialog box*

### Sound

Enables/Disables the sounds that accompany the different warnings. The sound itself is selected through the "[Sound setup parameters](#)".

### Pop-up window - on/off

Enables/Disables each of the pop-up warning windows.

### Pop-up window - Number

The number of times WorkPace will show a pop-up warning or make the warning sound before either giving up, or *insisting* on a break.

### Break window - Insist

If enabled, WorkPace will *insist* on a break. This means that if you have ignored all the pop-up warnings a break window will appear, deliberately interrupting your work and disabling the mouse and keyboard.

### Break window - Ignore button


Determines whether you are allowed to ignore a break or limit, or quit the break early. If enabled an ignore button will appear in the break window. This button can be pressed to either acknowledge you have seen the warning, or to ignore it and continue working. If there is no ignore button the break window will remain until the break is over, and you are allowed to use the computer again. During this

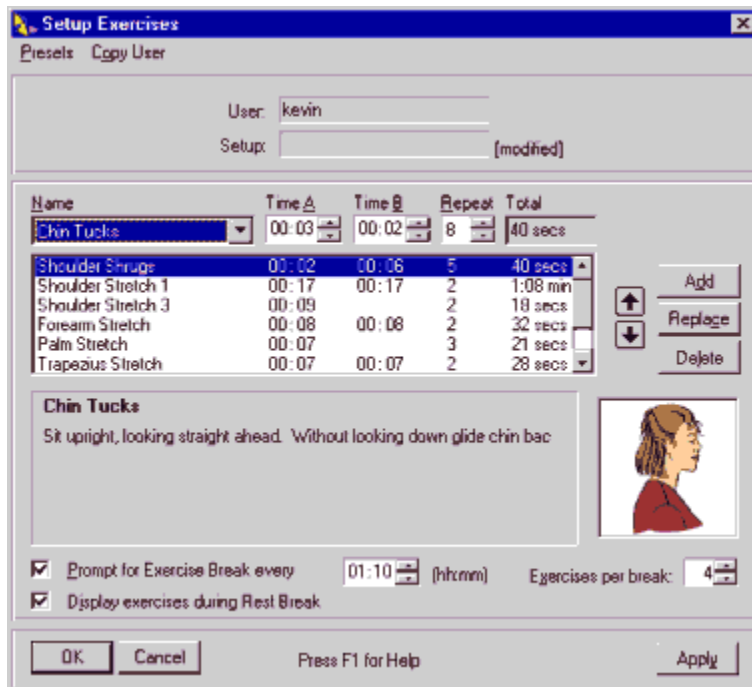
time the keyboard and mouse will be disabled to discourage use. See section "*Ignore option*" for more information.

## Exercise setup parameters

The exercise setup allows you to select the exercises and stretches to be displayed during an exercise break, when exercise breaks occur, and how many exercises are displayed in each break. For more information on choosing when to take exercises see "[Using WorkPace - Exercises](#)".

To edit the exercise settings make sure you are the current user (see "[Changing the current user](#)", or [Add a new user](#) ).

1. Right click on the WorkPace icon  (in the Windows System Tray) to display the WorkPace menu
  2. Select **Edit / Exercises**.
- An example of the exercise setup window is shown below.



*Exercise setup dialog box*

### To add an exercise

Select the stretch or exercise you want to add from the available list and press the **Add** button.

### To remove an exercise

Select the stretch or exercise you want to remove from your exercise list and press the **Delete** button.

### To change the order of your exercises

You may reorder your exercises by selecting one and pressing the **up arrow** or **down arrow** button to move it to the position you want.

### Exercise options



## Exercise options

The WorkPace exercises and the way they are displayed is a little complicated. Basically the exercises are of three types:

1. Single image exercises (e.g. Back stretch)
2. Two-part semi-animated exercises (e.g. Shoulder shrugs)
3. Left side / right side exercises. (e.g. Forearm stretch)

Each exercise has a display time (**Time A + Time B**), and number of repeats (**Repeat**), with the **Total** time for the exercise being **(Time A + Time B) x Repeat**.

For the single image exercises **Time B** is ignored. For the two-part exercises the two times determine the ratio between the two parts of the exercise. For the left/right side exercises **Time A** and **Time B** are the left side and right side display times and will normally be identical.

### Prompt for Exercise Break every ..

This determines how often you will be prompted (in the micro-pause break window) to do some exercises. Note that this value is a measurement of usage time, not time passed. If the value is set to 1 hr then you will be prompted each time you have accumulated another hour of active computer use. This means that the more intensively you are using the computer the more often you will be prompted to do some exercises.

If you do not wish to be prompted to do exercises in the micro-pause break window then you can untick the box next to this option.

### Display exercises during Rest Break

If this is enabled then exercises will be displayed at the beginning of a rest break. This means that whenever the rest break countdown Windows is displayed an exercise break window will also be displayed. This operates independently of the above parameter (*Prompt for Exercise Break every*).

### Exercises per break


This controls the number of exercises displayed each time the exercise break window appears. Exercises in the list are done sequentially. If, for example, you selected to do 3 exercises during each exercise break then the first 3 exercises on the list will be displayed the first time the exercise break window appears. On the next exercise break WorkPace will display the next 3 exercises on the list, etc. When the end of the list is reached WorkPace returns to the beginning.

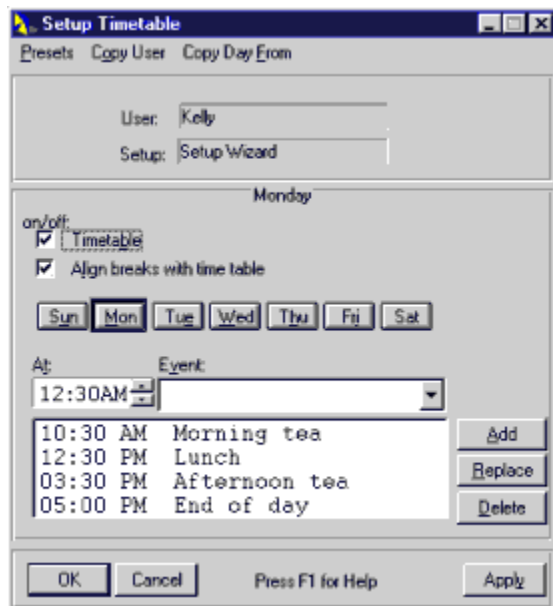
For more information on these parameters see "[Using WorkPace - Exercises](#)" and "[Fine Tuning Exercises](#)".

## Timetable setup parameters

The timetable helps WorkPace to arrange your breaks around your daily activities. It can do this by ensuring that breaks occur at the right time for you to leave for morning tea or lunch, and by reminding you of meetings, appointments, or other events. As a result WorkPace will not tell you to take a rest break at 12:20 PM, then have you wasting time for 10 minutes before going to lunch.

Make sure you are the current user (see "[Changing the current user](#)"), or [Add a new user](#).

1. Right click on the WorkPace icon  (in the Windows System Tray) to display the WorkPace menu
  2. Select **Edit/Timetable**.
- An example timetable dialog box is shown below:



*Timetable dialog box*

The easiest way to set up a timetable is to first choose a preset, or copy an existing user, then modify the timetable to suit.

### **Menu Copy Day From**

Copy the timetable for another day onto the day being edited. This is useful for putting similar timetables into several days, i.e. you setup one day and then copy it to the others.

### **Timetable on/off**

Tells WorkPace whether to use the timetable and remind you of the events you have listed.

### **Align rest break on/off**

Tells WorkPace to try to align rest breaks with the timetable events. WorkPace does this by reducing or extending the rest break interval as necessary.

### **Sun-Sat**

Use these buttons to choose a day of the week to modify.

### **Event**

The name or description of the event (e.g. lunch) you wish to add to your timetable. You can either type in a name or select a suitable name from the pulldown list.

### **At**

The time at which you want WorkPace to remind you of this event.

**Note:** If the event is time critical it may be a good idea to enter a slightly earlier time to ensure you have time to finish what you are doing and get to the event. For example if you have a meeting at 3:00 PM, put in the event at 2:55 PM. If you have an appointment in town you may want to use 2:45 PM.

---

**Add**

Add the event you have entered to the timetable.

**Replace**

Replace the currently selected event with a new one you have just entered.


**Delete**

Remove the selected event from the list.

## Sound setup parameters

A separate sound setup allows you to choose a different start and/or end sound for each break type. Alternatively you may want to turn the sound off altogether to prevent disturbance of co-workers.

Make sure you are the current user (see "[Changing the current user](#)"), or [Add a new user](#) .

1. Right click on the WorkPace icon  (in the Windows System Tray) to display the WorkPace menu
  2. Select **Edit/Sound**.
- An example sound dialog box is shown below:



*Sound dialog box*

### Start sound

The sound issued to indicate that it is time for a break, or that a limit has been reached.

### End sound

The sound used to indicate the end of a micropause or rest break.

### Play Buttons


Press this button to test out the sounds you have chosen. For the micropause and rest break you will hear the start sound, followed by a brief pause, then the end sound.

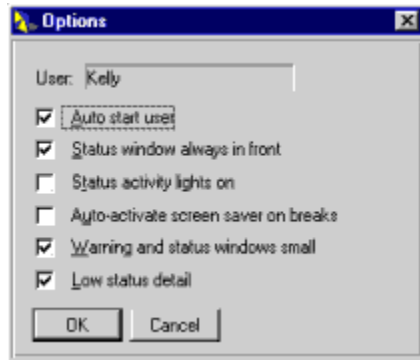
### Key clicks

When WorkPace insists on a break it disables the keyboard and mouse. With the *key clicks* sound on WorkPace makes a click sound if you press a key when the keyboard is disabled. This alerts you that a break is due when you are typing without watching the screen.

## Options window

The option window contains miscellaneous configuration options that are not directly related to WorkPlace's main functions. To display the option window

1. Right click on the WorkPlace icon  (in the Windows System Tray) to display the WorkPlace menu
2. Select **Edit / Options**  
The following window is displayed.



*Options window*

The options are autostart user, status window always in front, status activity lights on, auto-activate screen saver on breaks, warning and status window small, and low status detail. These options are saved individually for each user.

### **Autostart user**

This option makes WorkPlace begin monitoring the current user automatically when it is run. This is a useful option to have turned on once you have set yourself up.

### **Status window always in front**

This option makes the status window remain in front of all other windows at all times.

### **Status activity lights on**

This option turns on the status activity lights (these are described in section "Status window"). You may find these lights annoying and hence you can turn off.

### **Auto-activate screen saver on breaks**

This option automatically activates the screen saver when the rest break, end of day or end of week window is displayed. This protects confidential information that may be displayed on your screen.

### **Warning and status windows small**

Turning this option on reduces the size of pop-up warning windows and the status window. This option is automatically activated on displays of size 800 by 600 pixels or smaller.

### **Low status detail**

Turning this option on makes WorkPlace display a less detailed and smaller status window. This is useful under Windows 3.1 for minimising resource usage, and also when you are using a low display resolution (eg 640 x 480).


## Miscellaneous

Miscellaneous WorkPace functions include: Changing the current user, Putting WorkPace on standby, changing font and window sizes, and Viewing the status window.

## Changing the current user

When WorkPace is set up correctly on a network (see "[Network Installation](#)") the user is automatically changed when one person logs out and another logs in. Whilst one person is logged in it is not possible to change to a different one i.e. is single user.

If, alternatively, WorkPace has been installed as stand-alone then multiple users are allowed. For this case if several people normally use the same computer then each person should be entered as a new user. It is then very important that each person select themselves as the *current user* when they use the computer.

1. Double click on the WorkPace icon  to display the main WorkPace window
2. Press down arrow at the end of the **User** box
3. Choose your user name from the list
4. Press **Start Monitoring** (if not already pressed)
5. Close the main window


If the person is not on the user list then there are several options:


1. Add them as a new user - and initialise their setup for them, or
2. Put WorkPace on standby, or
3. Choose the **Anonymous** user

The "Anonymous user " can be chosen by anyone. It is intended only to be used by occasional users of the machine, who want to benefit from WorkPace, but do not wish to enter their own setup. No monitoring data is recorded for the Anonymous user.

## Putting WorkPace on standby

Whilst WorkPace is monitoring any use of the computer will be recorded under the current user. It is therefore very important that you not let someone else use the computer while you are the current user and WorkPace is monitoring. If you are away from the computer for a while and someone else may use the computer then put WorkPace on **Standby**.

1. Right click on the WorkPace icon  (in the Windows System Tray) to display the WorkPace menu
2. Select **Standby**

The WorkPace icon will now change to  and stop rotating. While on standby WorkPace does not monitor your computer usage, therefore when you return to the computer it is very important that you start WorkPace again, (press right mouse button on WorkPace icon and choose **Start Monitoring**), otherwise WorkPace will not monitor your usage and not issue break warnings.



## Changing font and window sizes

To change the font and window sizes:

1. From the main window select **Options / Font size**
2. Choose small, medium, or large fonts

WorkPace may take a few seconds to scale the fonts and the size of the windows, pop-ups and other graphics.

## Viewing the status window

If the status window has been closed or is hidden behind other windows you can redisplay it:

1. From the main window select **View / Status**

The status window, showing current times for the different breaks, will appear on the screen. Note that this window is only shown while WorkPace is in monitoring mode.

## User Passwords

If WorkPace has been installed in a network configuration the WorkPace passwords feature is not available, as security is obtained through the user's network log-on.


If WorkPace has instead been installed as stand-alone then, as no network log-in is assured, passwords can be created for each user. Thus you can password protect your setup and prevent other people from using your setup or accessing your monitoring data.

[Setting a password](#)

[Changing your password](#)

## Setting a password

Follow these instructions to set a password.

1. Right click on the WorkPace icon  (in the Windows System Tray) to display the WorkPace menu
2. Select **Edit / Set Password**.
3. Type in your password twice (once in each box) and press **OK**. For security, your password must be at least 5 characters long.
4. If you do not want a password to be set press the button **No Password** (use this to clear a previously set password).

Note that every time you run WorkPace you will have to enter your password to use your setup.

**Note** When you have finished using the computer you should change user to "Anonymous" to prevent your setup being used accidentally by someone else.

## Changing your password

You can change your password (note: passwords can only be set when WorkPace has been installed in stand-alone mode) whenever you like.

1. Select **Edit / Set Password**. You will be asked to enter your old password first.
2. Enter your old password and press **OK**. If you have forgotten your password, contact your system administrator.
3. You will now be prompted to enter your new password. Type in your new password twice (once in each box) and press **OK**. For security your password must be at least 5 characters long.

# Using WorkPace

This chapter explains the working regime WorkPace uses, and describes how WorkPace should be used to help you maintain healthy and productive work habits at the computer.

If you do not like the way WorkPace operates, e.g. rest breaks too soon, micropauses too long, or typing speed warnings too often, then see "[\*Finetuning WorkPace\*](#)" for instructions on changing your settings. Some simple instructions for "[\*Changing the current user\*](#)", "[\*Putting WorkPace on standby\*](#)", and "[\*Viewing the status window\*](#)" are contained in the previous chapter "[\*Setting up WorkPace\*](#)".

The instructions on using WorkPace are divided into the following sections.

[WorkPace and the System Tray](#)

[Status window](#)

[Micropauses](#)

[Rest breaks](#)

[Exercises](#)

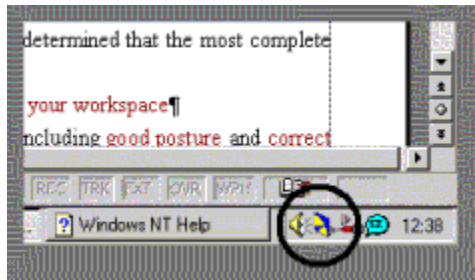
[Daily and Weekly Limits](#)

[Typing speed](#)

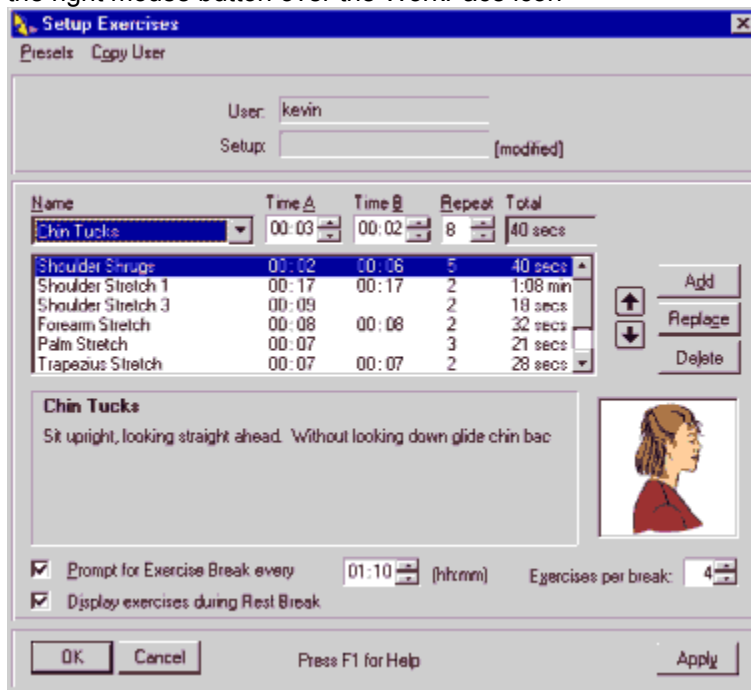
[Viewing the recorded Usage Statistics / Monitoring Data](#)

## WorkPace and the System Tray

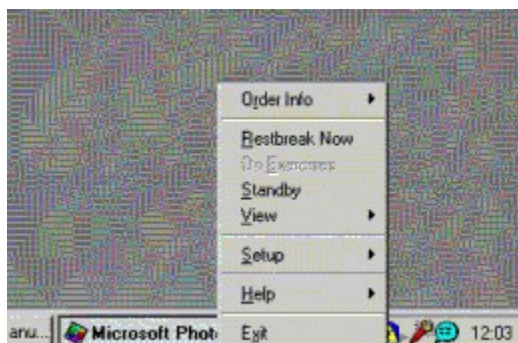
When WorkPace is operating it sits in a special part of the Task Bar called the System Tray, as shown below. When WorkPace is actually monitoring the clock icon will be moving.



The System Tray is normally used for programs that (i) run continuously in the background, and (ii) start automatically with Windows. Putting WorkPace in the System Tray helps free up space on your Task Bar. It also allows you to use WorkPace menu functions direct from the Task Bar. Simply press the right mouse button over the WorkPace icon

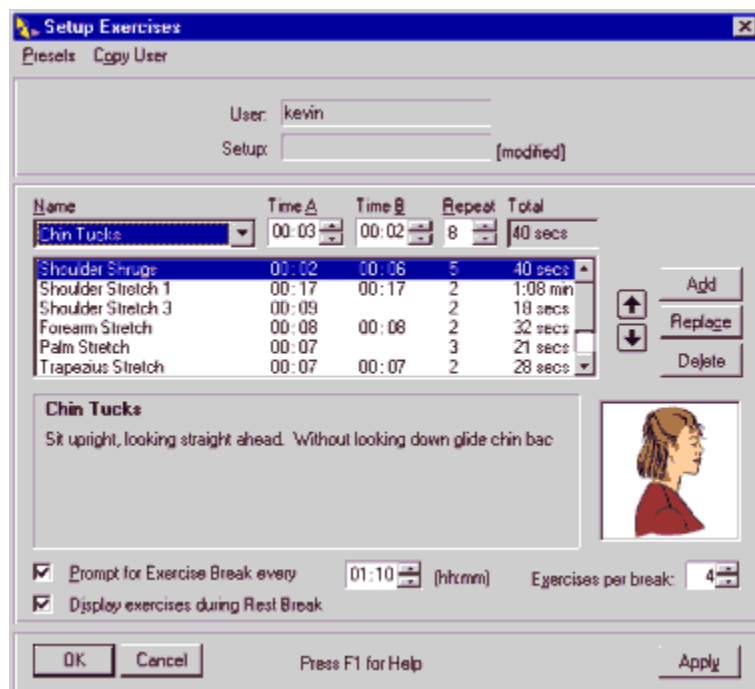


and the menu shown below will appear.



In earlier versions of WorkPace these menu options were only available from the main WorkPace window. The System Tray menu gives you access to most of the important menu options, but some options (e.g. adding and deleting users) are still only available from the main WorkPace window. This

window, shown below, can still be used simply by double clicking on the WorkPace icon (or by right click menu **View / Main window**).



*The main WorkPace window*

The WorkPace main window displays the following information

### Version

In the top right hand corner is displayed the software version number, and the current windows platform.

### User

The name of the current user. This is also a pull-down list from which you can change the user.

### Usage left Today

This displays the usage or work time left for the day. If the daily limit is turned off, it displays the time used today.

### Usage left Week

This displays the usage or work time left for the week. If the weekly limit is turned off, it displays the time used this week.

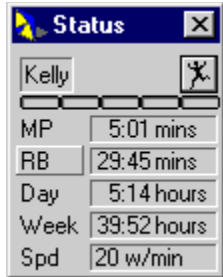
### Registration

Shows the Registration name and the number of licences registered. If the software is not registered then the word *Unregistered* will be displayed instead, and your date of trial expiry will also be displayed.



## Status window

The status window (shown below) is displayed by selecting **View / Status** from the WorkPace System Tray menu. The purpose of this window is to provide you with information on current status of WorkPace including the time remaining until breaks, and your typing speed.



*The WorkPace status window*

You should place this window at a convenient location on your screen (e.g. top right). WorkPace automatically keeps track of where you place the status window and will place it there next time you use the computer. If you don't want the status window taking up space on your screen, you can close or quit the window. You can redisplay it using the **View / Status** menu from the WorkPace System Tray menu.

You can change the size of the status window, and also whether it is Always in front through the "Options window".

Status window buttons

Status window display information

### **Status window buttons**

**Exercise button:** Press this to do some exercises and stretches.

**Rest Break button:** Press this at anytime to take a Rest Break.

**Display buttons:** These six small buttons located in the top right corner of the status window can be toggled to determine what information is displayed.

## Status window display information

The status window displays the following information.

### User

The name of the current user.

### Micropause

The time remaining until the next micropause with the pie chart showing this information in a graphical form. If the micropause is overdue, the pie chart turns red and the display box has a red border. If the micropauses are turned off, this box is blank.

### Rest break

The time remaining until the next rest break with the pie chart showing this information in a graphical form. If the rest break is overdue, the pie chart turns red and the display box has a red border. If the rest breaks are turned off, this box is blank.

### Usage/Work left: today

Displays the usage or work (depending on the selection in the "Break Timing Setup" window time left for today, which is also shown in graphical form by the pie chart. If the daily limit is disabled then this box shows the time *used* today.

### Usage/Work left: week

Displays the usage or work (depending on the selection in the "break timing setup" window time left for the week, which is also shown in graphical form by the pie chart. If the weekly limit is disabled then this box shows the time *used* this week.

### Av. typing speed

Displays the average typing speed (computed over several minutes of typing) in the units of words per minute, keys per minute, or keys per hour, depending upon the setting in the "typing speed setup" window.

### Instantaneous typing speed

This is the coloured horizontal bar and shows the instantaneous typing speed. When you are typing at 2/3 the speed of your typing limit the bar turns orange, and when you are typing over your typing limit, the bar turns red. If the bar remains red for too long, you are likely to be issued with a "slow down" warning.

### Message window

This window displays messages about when events such as micropauses, and rest breaks occur, as well as any other WorkPace actions such as adjusting rest break times or daily limits. Use the scroll bar to view previous messages.

### Activity lights

These lights display that WorkPace is active and monitoring. The green light on the left blinks on and off continuously as WorkPace is monitoring and shows it is functioning. The yellow light on the right turns on every time WorkPace detects keyboard or mouse activity. These activity lights are primarily designed for testing purposes and by default are not displayed. To display them see "Options Window".

## Micropauses

This information is presented as a series of questions. For more information on setting up and changing micropause parameters see "[Break Timing Parameters](#)", and "[Finetuning Micropauses](#)".

[What is a micropause and why is it needed?](#)

[When should I take a micropause?](#)

[How do I take a micropause?](#)

[What if I already take breaks?](#)

[What if I keep on working?](#)

[What happens if I press the Ignore button?](#)

## What is a micropause and why is it needed?

A micropause is a brief break every few minutes. When you are working at a computer, you are holding your hands over the keyboard or mouse. This posture uses the muscles in the neck, shoulders, arms and hands. The level of use is not high, however it is enough to significantly reduce the blood flow to the muscles, especially those of the hands and forearms. Muscles are designed to cope with this to a degree by using stored energy; when this runs out (after a few minutes), muscle fatigue results and lactic acid builds up, causing the muscles to ache. To prevent this, the muscles must be regularly replenished by relaxing them and restoring blood flow. In activities using dynamic muscle contraction this occurs automatically, e.g. in swimming, walking or cycling your arms and legs work and rest alternately. For activities involving static muscle contractions or a constrained posture, such as using a computer, regular rest may not occur. In the days of mechanical typewriters a change of posture and a break for the muscles occurred automatically when changing the paper, using the return lever, or pausing to white out a mistake. However, with modern computers these activities no longer occur and we need to artificially reintroduce them. Using a computer is a low intensity activity and the breaks need only be very short (as little as 5 seconds) to adequately replenish the muscles. Such pauses are called *micropauses*.

Overall micropauses have been shown to be *very* effective at preventing RSI/OOS and aches and pains from using a computer. If you do nothing else, at least take the micropauses!

The level of muscle fatigue can also be lowered by reducing static muscle loading, i.e. good posture, using a forearm rest / and by maintaining good muscle strength and overall fitness.

## When should I take a micropause?

The correct interval setting between micropauses depends upon a number of factors.

- Your resistance to fatigue, i.e. your fitness
- The level of muscle tension your work produces
- The effectiveness of your breaks
- How long you work for
- Whether you have had past problems with RSI/OOS

The more strenuous the activity and the longer you work the more often you should take micropauses. For very strenuous activity, the muscles tire quickly. As an example, try picking up a chair and holding it still at arms length. In as little as 10 to 20 seconds you will not be able to hold it any longer and will have to put it down for a short while, before you can pick it up again. For computer use, the level of muscle activity is much lower, and the muscles can operate longer between breaks. Experts recommend that a break should be taken about every 3-6 minutes for several seconds. Unlike the chair holding exercise, this 3-6 minute interval is not chosen as the fatigue limit for your muscles. The fatigue build up after 3-6 minutes should be undetectable, however the cumulative effect by the end of a long day can be very noticeable. Five minutes is a value that will allow you to maintain sustainable work habits at your computer every day for many years.

With WorkPace monitoring your work, you will be automatically reminded when to take a micropause. Depending upon the setup the reminder will consist of a short sound (e.g. a beep) and a small pop-up warning.



*The micropause pop-up warning window.*

This warning will remain on the screen for half a minute or so, with WorkPace waiting for you to take a micropause. How often WorkPace issues this reminder depends on your setup and upon whether you naturally take micropauses.

## How do I take a micropause?

The idea of a micropause is to relax all your muscles, and your mind too if you can (stress is an important contributor to muscle tension). Below are a number of pointers to help you take a micropause properly.

- Rest your arms in your lap, on the forearm rest, or drop them at your sides
- Allow your shoulders to "hang loose"
- Lean back in your chair
- Lift then drop your shoulders, letting them relax
- As you breathe out, just "sag" and "let go of everything"
- Look away from the screen into the distance, or even close your eyes briefly if you like.

Properly relaxing the muscles for a micropause requires practice, and those who need it most often find it hardest to learn. Only several seconds of relaxed muscles is needed to restore blood flow, but it usually takes a few seconds to achieve this relaxation properly (e.g. to perform the activities listed above). For this reason the micropause duration used by WorkPace is usually 8 to 10 seconds. For those with past problems 15 to 25 seconds is recommended to allow extra time to fully relax.

WorkPace automatically detects that you have stopped working and are taking a micropause, and the pop-up window will be replaced with a micropause break window.



*The micropause break window.*

When you have relaxed for the recommended length of time (the *micropause duration*) the window will disappear, a beep will sound, and you may continue working.

## **What if I already take breaks?**

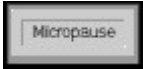


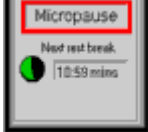

If you already take micropauses then WorkPace automatically detects these and only reminds you if you don't take them. To illustrate this watch the status window micropause timer. Do some typing and then take a break. After 15 seconds or so you should see the timer reset automatically.

This means that WorkPace has detected your break, and decided it does not need to remind you. Note that your voluntary break is only counted if it is long enough. Because voluntary breaks may not be proper micropauses, they only count if they are 1½ times longer than a warned micropause.



## What if I keep on working?

After a micropause appears WorkPace will give you around half a minute to take the micropause. At the end of that time, WorkPace will either give up or *insist* on a micropause with the break window. During the half minute waiting period the colour of the pop-up will change. This sequence of events is shown below:

Time	Action	Display
micropause due	micropause Pop-up	
10 secs overdue	orange border	
20 secs overdue	red border	
30 secs overdue	micropause Insist computer locked	
micropause duration	micropause finished	

*Micropause warning sequence*

Eventually WorkPace will force you to stop and the micropause break window will appear. A red outline indicates that the micropause was forced (i.e. insisted). Unless you press **Ignore**, the break window will remain, locking up your computer, until the micropause is over.

## What happens if I press the Ignore button ?

The micropause break window will disappear immediately, and you can continue working. If the micropause insist window is displayed (has red border around title) the computer is locked up and is only freed when the micropause is over, or by using the mouse to press the **Ignore** button. Ignoring micropauses too often is not a good idea, and leads to bad working habits. If you find yourself ignoring too many micropauses, you should consider switching on the insist option, and turning off the ignore button, or changing your setup such that micropauses do not occur so often. Generally speaking it is recommended that the Ignore button be left off for micropauses.

## Rest breaks

This information on rest breaks is presented as a series of questions. For more information on setting up and changing Rest Break parameters see "[Break Timing Parameters](#)", and "[Finetuning Rest Breaks](#)".

[What is a rest break?](#)

[When should I take a rest break?](#)

[What happens when a rest break occurs?](#)

[Can I take a rest break at any time?](#)

[How should I do the exercises?](#)

[What should I do during a rest break?](#)

[What if I keep working after a rest break warning?](#)

[What if I ignore the rest break altogether?](#)

## **What is a rest break?**

A rest break is a period of time spent away from the computer. Ideally during a rest break you should get out of your chair, walk around a bit and do some stretches and exercises. At a minimum the rest break should be spent doing a different activity, preferably one that gets you out of your chair.

A rest break should be of much longer duration than a micropause. (e.g. 5 to 10 minutes) and is taken after much longer intervals. (e.g. every hour).

Micropauses, even if done correctly still allow a level of muscle fatigue to build up. Also, whilst sitting still in a chair, it is impossible to properly rest some muscles, such as the postural muscles in the back and neck. A rest break provides a more sustained break to both the body and the mind. The mind is an aspect that should not be overlooked, as regular breaks, or changes of activity have been shown to improve concentration, and enhance productivity.

## When should I take a rest break?

As with the micropause, WorkPace will issue a warning when a rest break is due. A pop-up warning window like that below will appear on your screen accompanied by a sound.



*The rest break pop-up warning window*

This pop-up window will remain on your screen for about half a minute while WorkPace waits for you to finish working and take a rest break.

In your setup the *rest break interval* determines how often rest breaks occur. This interval should be between 20 and 60 minutes. Its exact value will depend upon the type of work you do, and any history of past RSI problems. Note that the time until your next rest break is measured as the time you spend *actively* using the computer, not just the time since the last rest break. This means that if you take micropauses and perhaps some short breaks it could take, for example, 45 minutes before your next rest break, even if the in a rest break interval is set at 30 minutes. Generally speaking, the more relaxed your working style the longer it takes before you will need to take a rest break. In practice many people may never get prompted by WorkPace to take a rest break.

## What happens when a rest break occurs?

When a rest break occurs WorkPace normally brings up the Exercise and Stretches window (exercises appearing during the rest break can be disabled from the "[Exercise and Stretches Setup Parameters](#)").

Each time the Exercises and Stretches window appears it takes you through a different set of exercises and stretches designed to relax your muscles and restore blood flow. After the exercises are finished the rest break window will remain on your screen.

If WorkPace detects that you have stopped working after the rest break warning appears, the rest break timer window will appear on the screen (shown below).



*Rest Break window , with time counter and postural advice*

This window counts down the remaining time until the end of the rest break. The window also displays the time left for the day and a simple hint about posture, workplace setup, working techniques, or using computer packages. If WorkPace has been installed in stand-alone mode then the break window has a **change user** button which when pressed returns you to the main WorkPace window from which a different user may be selected.

## Can I take a rest break at any time?

Yes, you can take a rest break whenever you wish, not just when WorkPace advises you to do so. Even if a rest break is not due WorkPace will still count any time away from the computer, if long enough, as a rest break. As soon as you stop using the computer WorkPace begins counting down internally. When your time away reaches 80% of your rest break period (e.g. 4 minutes if your rest break is set to 5 minutes) then the rest break timer will reset. You can see this happen on the status window. If you are going away from the computer and want to be able to see the rest break countdown window you can press the rest break button on the status window. By pressing this button you can take a rest break any time you wish. You can also take rest break by selecting **Restbreak Now!** from the WorkPace icon menu.

## How should I do the exercises?

Exercises and stretches should ideally be done away from your computer. However, it is at least a good idea to get out of your chair and stand up to do the exercises. For detailed advice on performing the exercises see "*Exercises*".



## What should I do during a rest break?

First of all you should follow the exercises and stretches in the Exercise window (see section "Exercises"). You should then spend your remaining time away from the computer, giving your body and mind a change of work. There are a number of possibilities for the rest break, in order of preference:


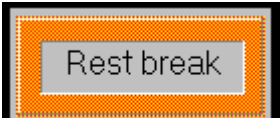





- Go for a short walk and relax
- Take a tea or lunch break
- Stand up and do some stretches and exercises
- Catch up on mail or important reading
- Do some filing/writing/thinking

If your breaks are very short (e.g. 5 minutes) they should be spent out of your chair and not using your arms if possible, i.e. don't spend 5 minutes writing and filing. Short breaks need to be high quality breaks. For longer breaks (15-30 minutes) it is generally okay to spend them doing another activity, but the more different the better.

## What if I keep working after a rest break warning?

After a rest break reminder appears WorkPace will give you around a minute to stop working. If you keep working WorkPace will give up for a while and try again 5 minutes or so later. If you Ignore this warning and keep on ignoring warnings (for the number given in the "[Warning configuration setup](#)"). WorkPace will either give up, or *insist* on a rest break and start the rest break timer. When a rest break is *insisted* and the rest break window appears your computer will be locked to prevent you from working and make you take a break. When the rest break is finished the computer will be unlocked again. In the [Warning configuration setup](#) you can choose to have an ignore button on the rest break window. This will allow you to keep on working, but the rest break will remain overdue.

An example sequence of events for a rest break is shown below

Time	Action	Display
rest break due	rest break Pop-up	
20 secs overdue	orange border	
40 secs overdue	red border	
60 secs overdue	Pop-up disappears	
5 minutes later	Rewarn about rest break	
⋮	⋮	⋮
6 minutes later	If still working then <i>Insist</i> on rest break, lock computer, (& display exercise window)	
after rest break duration	rest break finished	

This process gives you considerable freedom as to exactly when you take your rest break. If you wish you can easily spend another 5 to 10 minutes finishing something before WorkPace *insists* on

you taking the break. Even then, depending upon your settings you may be able to ignore the break.

## What if I ignore the rest break altogether?

If you ignore all the rest break warnings or press the **Ignore** button, WorkPace will stop trying to warn you about a rest break, and will wait until the next one is due. However, until you have taken a proper break, the rest break will be overdue. This will be seen in the status and micropause windows with a red pie chart showing how much overdue the break is.

When a rest break is overdue you will be offered a chance to take it when the micropause break window appears. As shown below, the micropause break window



*The micropause break window*

will contain an extra button. If you are now ready to take your overdue rest break then press this button. The rest break timer window will then appear. You can also take a rest break at any time by pressing the rest break button on the status window, or by selecting **Restbreak Now** from the WorkPace icon menu.

## Exercises

This information on Exercises is presented as a series of questions.

When does an exercise break happen?

Why do exercises and stretches?

How should I do the exercises?

How often should I do exercises and stretching?

## When does an exercise break happen?

Exercise breaks can occur by two methods:

1. Every so often you will be prompted by the micro-pause break window to do some exercises (to control how often see "Prompt for exercises every.." in "Exercise Setup"). When you are due to do some exercises a special button will appear in the micro-pause break window, as shown below. Simply press this button to bring up the exercise window.



2. The exercise break window can be automatically displayed when rest breaks occur. (See "Exercise Setup" to turn this On/Off)

You can also take an exercise break at any time you wish by:

1. Pressing the exercise button on the status window
2. Choosing **Do Exercises** from the WorkPace system tray menu

## Why do exercises and stretches?


There is still some controversy about the benefits of active exercises done at the computer (i.e. exercises involving a lot of movement). Some studies have shown little benefit, and others have found that a proportion of commonly used exercises can actually aggravate problems. For these reasons WorkPace places a greater emphasis on stretching and uses a selection of exercises that have been carefully screened by a qualified physiotherapist to ensure they will cause no problems. Stretches have been shown to be somewhat beneficial and relaxing time muscles and restoring range of movement. They are therefore in line with the theme of "relaxing your muscles to restore blood flow". Active exercise is certainly still beneficial, but the best way to do such exercise is as several sessions a week at your local gym. Maintaining aerobic fitness and good muscle tone and strength is very important to minimizing your risk of computer related injuries. The more vigorous activity you indulge an outside work time the better your body will cope with the sedentary work in your office.

## How should I do the exercises?

It is very important that you do the exercises correctly, following the instructions given. For detailed information and lots of helpful hints see the section on "*Exercises and Stretches*".



## How often should I do exercises and stretching?

Ideally several times a day. If you spend a lot of time at the computer (or have had previous problems with RSI/OOS) then do them more often - perhaps every hour or so. Normally WorkPace will prompt you to do some exercises whenever a rest break occurs. WorkPace will also prompt you to do some exercises every couple of hours or so (this depends upon the **Exercise Interval** in your [Exercise Setup](#) ). Besides these you are free to do some exercises any time you feel the need simply by pressing the **Exercise** button  on the [status window](#), or selecting **Do Exercises** from the WorkPace icon menu.

## Daily and Weekly Limits

This information is presented as a series of questions.

What are daily and weekly limits for?

What is the difference between work and usage?

Why separate daily and weekly limits?

What do I do when warned about a daily or weekly limit?

What if I keep on working after a daily or weekly limit warning?

What happens if I press ignore on the daily or weekly limit window?

### **What are daily and weekly limits for?**

Human bodies (and minds) are capable of carrying out a huge variety of tasks, however, long periods spent in the same position repeating the same actions can put considerable physical and mental strain on us. Computer usage, like many activities (e.g. exercise, eating, drinking) is best done in moderation. Spending too much time at a computer can cause headaches, eye strain, fatigue, loss of concentration and sore muscles. Experts therefore recommend that the level of usage each day, and each week be restricted. The recommended limits range from 4 to 7 hours a day (active usage not including breaks), and 20 to 35 hours a week.

## What is the difference between work and usage?

WorkPace has two types of limits: work limits, and usage limits. These two are related. The usage limit is a limit on time spent actively typing, or using the mouse, and any time not using the computer is not counted. The work limit on the other hand takes into account the micropauses and rest breaks you should be taking. If you follow WorkPace's warnings for breaks, the work limit will tell you how long it will actually take to reach your usage limit.

As an example if you take a 10 second micropause every 3 minutes, and a 10 minute rest break every 40 minutes then it will take you approximately 5¼ hours work to reach a usage limit of 4 hours.

Alternatively, with the same micropause and rest break settings, if you want to work an 8 hour day on the computer (work limit = 8 hours), then during that day, with the setup described above it is expected that you will total no more than 6 hours usage (i.e. this is the usage limit).

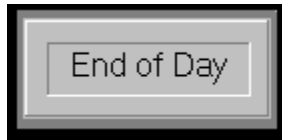
See "Break Timing Parameters", for more information on how to set up daily and weekly limits

## Why separate daily and weekly limits?

Everyone occasionally has extra work to do. Overtime, working late on a project, or catching up when behind. This means that on occasion you may need to work more than the recommended 4 to 6 hours per day. For most people this will cause no problems if you ease up a bit in compensation the next day, or later in the week. For this reason WorkPace monitors your total usage for the week. If you have worked extra time for several days WorkPace will recommend that you use the computer for fewer hours a day during the remainder of the week. For example, your daily limit might be 6 hours and your weekly limit 30 hours. If you work extra time on Monday, WorkPace will warn you when you exceed 6 hours, but not stop you (depending upon setup). If you end up working a total of 10 hours on Monday, only 20 hours will be left for the rest of the week. WorkPace will therefore adjust your daily limit for the rest of the week to 5 hours. Consequently you will be encouraged to use the computer a little less each day to compensate for the overtime on Monday.

## What do I do when warned about a daily or weekly limit?

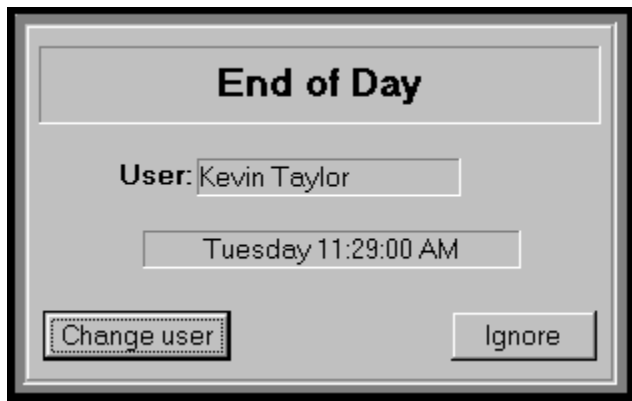
When a pop-up warning, as shown below is issued you may continue working for a while if you wish.



*Daily limit pop-up warning*

Ideally, however, you should stop your computer work for that day, or week. If your work day/week is not over, the remaining time should be spent differently, e.g. writing, reading, etc.

After a warning, WorkPace will detect automatically that you have stopped using the computer and put up an end-of-day or end-of week window.



*End of day window*

If you leave the computer switched on, this window will remain until you are allowed to start working again (i.e. the next day, or after the weekend).

When one of these windows appears you may let another user use the computer by pressing the **Change User** button. WorkPace then returns to the main window.

## **What if I keep on working after a daily or weekly limit warning?**

The daily limit and weekly limit warning systems work very similar to those for the rest break. The pop-up warning that appears on the top of your screen will remain there for only a few minutes. If you do not stop working it will disappear for 10 to 15 minutes. Reminders will continue to appear every 5 minutes for a while. After 2 to 3 reminders (number of pop-up warnings in warning configuration) WorkPace will either give up or insist on you stopping work (the end-of-day/week break window will appear and lock the computer).

## **What happens if I press ignore on the daily or weekly limit window ?**

If you press the **Ignore** button WorkPace will wait for an hour or so, before reminding you again.

In the meantime, rest breaks and micropauses will continue as usual and it is strongly recommended that you do take rest breaks if working extra time. If you have a lot of extra work the rest breaks may mean you take longer to finish, but it is when under greater than average stress that your body needs the rest breaks most.



## Typing speed

This information on Typing speed is presented as a series of questions.

Why is typing speed monitored?

How do I know I am typing too fast?

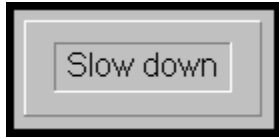
What should I do if I am warned about typing too fast?

## **Why is typing speed monitored?**

Excessive typing rates are a contributing factor to OOS/RSI injuries. The maximum comfortable typing speed varies for individuals, but experts recommend that it should not exceed an average of 18,000 keys/hour (or 300 keys/min). Typing faster than usual when extra work is on, or time is short should also be avoided. WorkPace monitors your typing speed so that it can warn you of these occasions.

## How do I know I am typing too fast?

If you type too fast for too long WorkPace will issue a warning, as shown below



*The pop-up warning when you are typing too quickly*

Depending upon the warning configuration this warning will normally not interrupt your work, but it will remain on the screen until your typing speed has slowed down again.

You can see how close you are to the limit by watching the typing speed bar in the status window. This changes to orange if you are close to the limit, and becomes red when you're over it. If it is red for too long WorkPace is likely to issue a warning.

**Note:** The typing speed limit is turned off by default. To turn it on go to the **Edit/ Typing Speed** window.

---

## **What should I do if I am warned about typing too fast?**

You can either ignore the warning, or slow down a little. Note that smooth even typing is much better than jerky bursts of fast and slow typing(see "[Correct keyboard Usage](#)"). If you find you are warned too often, you may need to adjust your typing speed limit - see "[Typing speed limit parameters](#)".

## Viewing the recorded Usage Statistics / Monitoring Data

WorkPace monitors all aspects of a user's work, including time spent at the computer, keyboard use, mouse use, and compliance with WorkPace breaks and warnings. This information is recorded as a summary for each day with up to a year's worth of information stored in each user setup file. Some examples of the monitoring information are shown below. The recorded information, showing all the user's past activity, can be viewed through the **View / User Statistics** or **System Admin / User Statistics** menus.

This information can be exported for further analysis using the new program "*WorkPace Reports*".

The screenshot shows a window titled "Daily Usage Statistics" for user "Kevin". It displays various monitoring metrics organized into sections: Time, Settings, Typing, and Mouse. The "Time" section shows the date as 29 Sep 1998, with a start time of 10:16 AM and an end time of 09:01 PM, resulting in a total usage of 4:56 hours. The "Settings" section lists micropause and rest break intervals and durations, along with daily and weekly limits. The "Typing" section provides a detailed breakdown of keystrokes and key presses for various keys. The "Mouse" section shows the number of clicks and double-clicks, as well as the total mouse time.

Time	
User:	Kevin
Date:	29 Sep 1998
Start:	10:16 AM
End:	09:01 PM
Usage:	4:56 hours

Settings	
MP int:	2:00 mins
MP dur:	30 secs
RB int:	30:00 mins
RB dur:	25:00 mins
DL:	3:29 hours
TS lim:	Off
keys/min	Warn after
Off	Off
Warn Num	Warn delay:
Off	Off

Typing	
Keystrokes:	11353
Shift:	992
Up:	507
Space:	501
Warnings:	0
CTRL:	508
Down:	789
Enter:	677
Spd (k/min)	131
Backspc:	519
Left:	572
Esc:	77
Alt:	343
Del:	252
Right:	435
Tab:	159

Mouse	
Mouse clicks:	1991
Mse dbl clicks:	294
Mouse time:	57:58 mins

*Daily Summary of Monitoring Information (Usage Statistics), Page 1*

Daily Summary of Monitoring Information (Usage Statistics), Page 2

## **How can I print out the monitoring data?**

A special program WorkPace Reports is provided to allow you to print out the monitoring data. This program lets you access the data in variety of ways and export it to other packages for further analysis or printing.

# The WorkPace Warning System

WorkPace is intended to assist you with regulating your computer work by providing you with information on the following

1. The taking of micropauses (very brief breaks every few minutes)
2. The taking of rest breaks (regular time away from the computer)
3. Taking exercises
4. The amount of computer work you do each day
5. Your typing speed

WorkPace helps you by issuing reminder warnings when breaks are due, or working limits are exceeded. This chapter explains in more detail the functioning and options of the warning system. For each type of break or limit the warning sequence consists of two components

1. **A pop-up warning**: This warning appears while you are using the computer and is intended to remind you that a break is due or a limit is exceeded. It does not interrupt your work.
2. **The break window**: This window appears when you are actually taking the break and remains on the screen until the break is over. If you ignored the pop-up warning the computer is usually locked whilst this window is being displayed.

Pop-up warnings

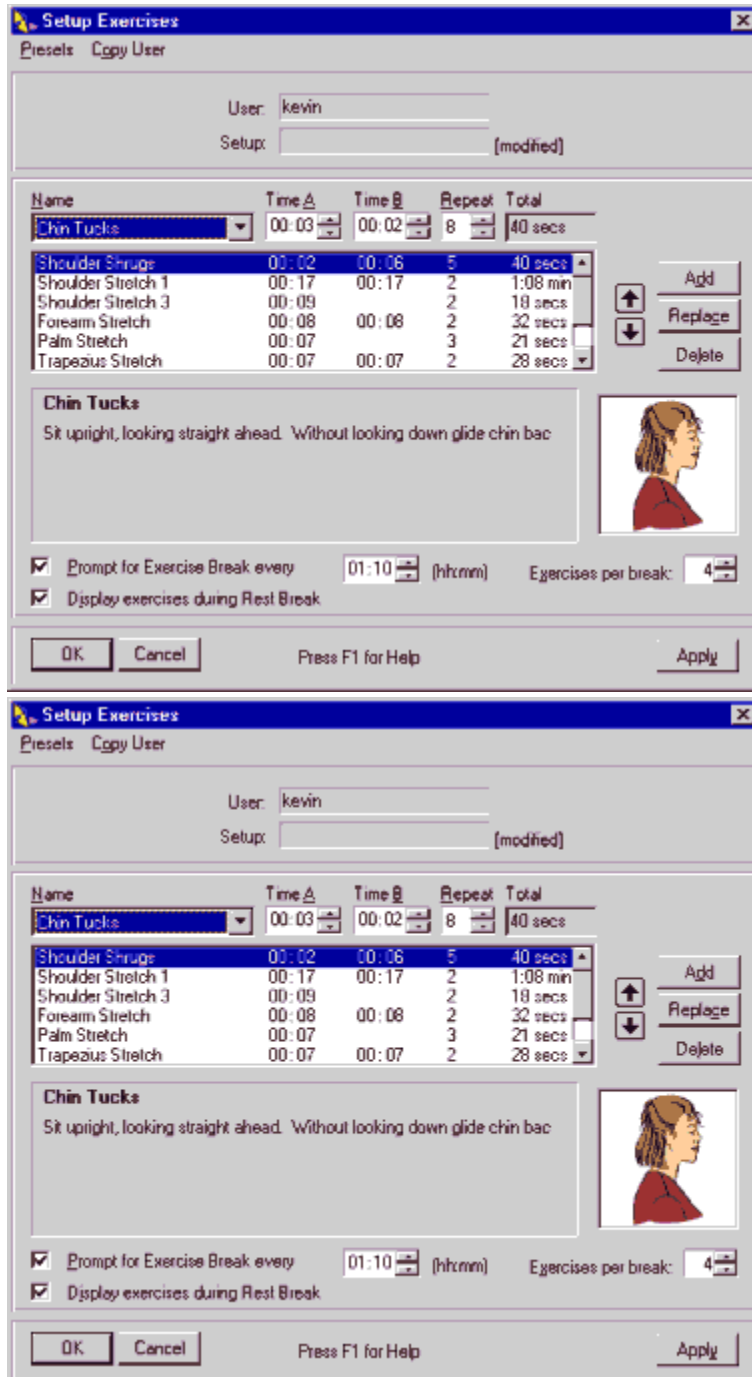
Break windows

Warning sequence example



## Pop-up warnings

Pop-up warnings appear to remind you that a break is due or a limit has been exceeded. It is a small window containing a corresponding message and appears in the centre of the screen. For example when a micropause is due, or a rest break is due, the pop-up windows look like this respectively.



*Micropause pop-up window*

*Rest break pop-up window*

Within a few seconds of initially appearing the pop-up window moves to the top of the screen to avoid blocking the view of your work window. If at any time a pop-up window is blocking your view, simply move the mouse over the its centre and it will move out of the way.

The pop-up warning does not stop you from working, and gives you the freedom to take the break when you are ready. It will remain on the screen for about 30 seconds, and changes colour with time from grey to orange, then red. If you do not take the break within this time, WorkPace may assume you do not wish to take it and the pop-up window will disappear. WorkPace will warn you again about the break a while later. The number of times that WorkPace warns you is determined by the **Number of pop-up warnings** as set in the "*Warning configuration*" setup.

If you do start taking the break while the pop-up window is showing, the break window will appear automatically. However, if you ignore multiple warnings (or just 1 for a micropause) then the break window may appear to insist on your (i.e. force) your break.

Number of pop-up warnings

Insist option

## Number of pop-up warnings

For a particular break or limit, the number of pop-up warnings you are given before being forced to break is set in the "Warning configuration". If this number of warnings have been given, and you still have not taken the break, WorkPace will either give up and assume you are not going to take the break, or it will *insist* on the break if the **insist** option is turned on.

**Note:** For the micropause you are ever only given *one* pop-up warning.

---

## Insist option

If you have the insist option turned on, WorkPace will insist on (i.e. force) the break after the number of pop-up warnings set in the warning configuration setup have been issued. This means the keyboard and some of the mouse functions will be disabled and the **break window** will appear, even if you are still working the break window will remain until the micropause or break is taken.

## Break windows

A break window is displayed while you are actually taking the break. It remains on the screen until the break is over. There are different break windows for the micropause, rest break, daily limit and weekly limit, but there is no break window for the typing speed limit.

The break windows may display information on upcoming breaks and other information.

Ignore option

## Ignore option

If you have the Ignore option turned on in the "Warning configuration setup" then the break window will contain an ignore button. Pressing this button with the mouse tells WorkPace you wish to ignore this break and the break window will disappear letting you continue your work.

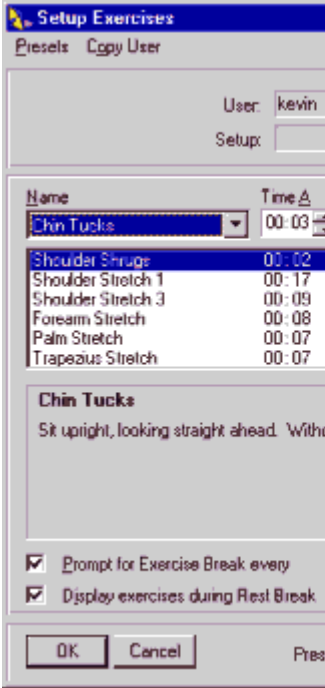

**Note:** This button is intended to be used as an emergency exit only, and you should not get into the habit of pressing it.

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It is strongly recommended you leave the micropause ignore button off.

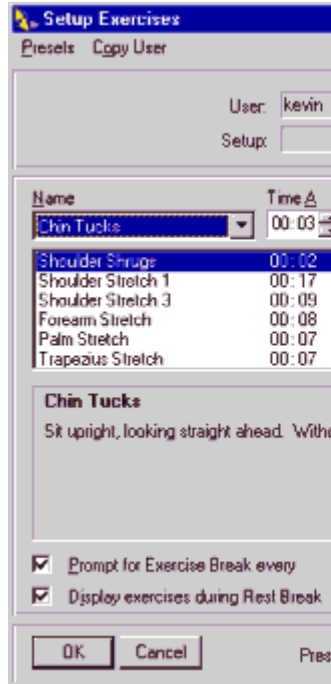
## Warning sequence example

As an example consider a setup where a 10 minute rest break is to be taken every 50 minutes, i.e. *rest break interval* = 50 minutes, and *rest break duration* = 10 minutes. A possible sequence of events might be:

Time Elapsed	Action	Display
0 minutes	You start working	WorkPace starts monitoring
50 minutes	Rest break Pop-up	
30 seconds later	You are still working	

55  
minutes

Rest break reminder



30  
seconds  
later

You keep on working

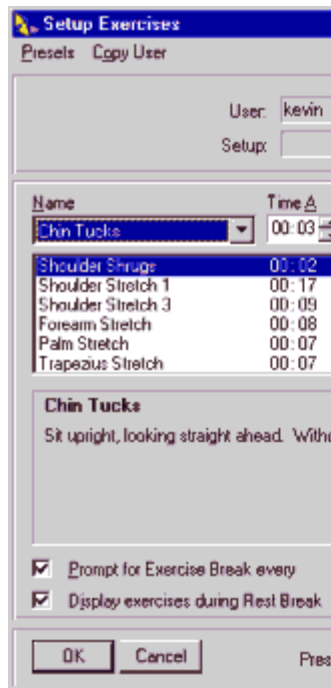


56  
minutes

You have ignored the  
warnings. WorkPace  
*insists* (forces) rest  
break

56 - 66  
minutes

Rest break window  
keyboard / mouse use  
suspended





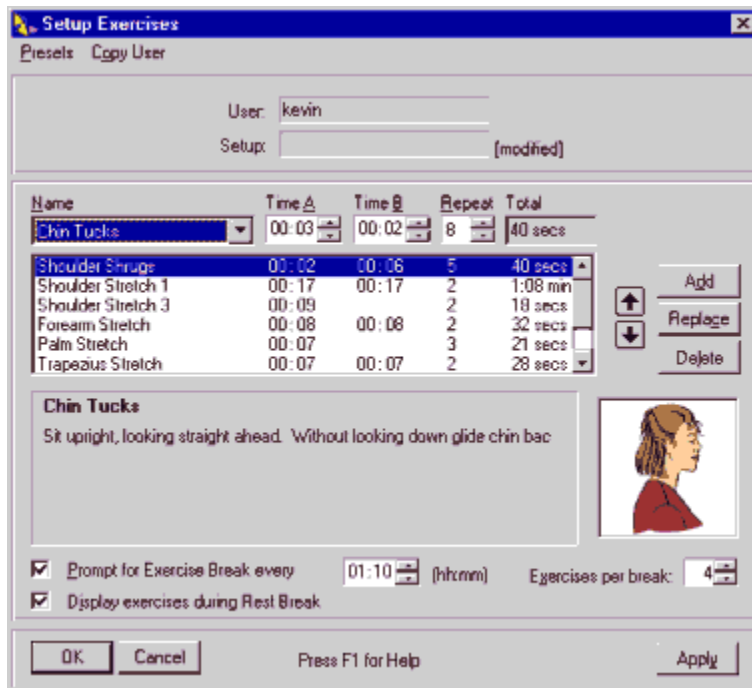
66  
minutes

Rest break over, you  
can resume working



The exact sequence of events will depend upon your setup and also your actions. For example, three pop-up warnings may be given instead of two, and the *insist* may be turned off. Also, if the user stops work after one of the pop-up warnings WorkPace will detect this and automatically start the rest break. If you completely ignore the warnings *and* press the **Ignore** button WorkPace will stop pestering you and accept that you wish to continue working. WorkPace may, however, remind you again a while later.

If a break or a limit is exceeded an extra button will also appear in some of the windows, as shown below:



*Micropause window with rest break button*

Pressing this button will tell WorkPace that you are now ready to take your rest break, or finish work. You can, of course, also press the rest break button in the status window, too.

# Fine tuning WorkPace

If, while using WorkPace, you find you are interrupted too often, you may wish to adjust some of the timing parameters through using the "*Advanced setup*" options.

The fine tuning instructions are divided into the following categories

- Micropauses
- Rest breaks
- Exercises
- Daily/weekly limit
- Typing speed limit
- Status window
- Miscellaneous

## Fine tuning micropauses

Micropauses are the most important break for the prevention of RSI. It is advised you do not deviate too much from the recommended setup parameters. Problems you may have are

- Micropauses occur too often
- Micropauses are too long
- Micropauses interrupt my work
- Micropause sound is annoying

## **Micropauses occur too often**

This means that the micropause interval may be too small. To fix:

1. Choose **Edit / Break timing**
2. Increase the value of the **Micropause interval** a small amount
3. Press **OK**

**Note:** Medical experts recommend that micropauses be taken at least every 3 to 6 minutes. Although this may seem irritating at first you should persevere. Micropauses are the most important of all breaks. After several weeks, taking micropauses should feel far more natural.

---

## **Micropauses are too long**

Decrease the micropause duration. To fix:

1. Choose **Edit / Break timing**
2. Decrease the value of the **Micropause duration** a bit
3. Press **OK**

**Note:** Medical experts advise that as little as 3 seconds relaxation is needed to refresh the muscles. However, it usually takes a short while to relax the muscles first. For this reason it is recommended that micropauses be at least 8 seconds, i.e. 4 to 5 seconds to relax, and 3 to 4 seconds whilst relaxed to refresh the muscles.

---

## Micropauses interrupt my work

Although this is what they may first appear to do, you should try to learn to get used to them. After a while you should hardly notice them and with some practice, you can learn to use micropauses as a method of "pacing" your work. If you ever think that they are holding up your work, remember that micropauses only add up to 6 to 10 minutes total over a whole day on the computer. However, if you still find the micropauses too annoying you can try one of the following

1. Choose **Edit / Warning configuration**, then
2. Either, turn on the **Ignore** option
3. or, turn off the **Insist** option
4. or, increase the micropause interval

## **Micropause sound is annoying**

If you find the micropause warning sound is annoying you or your co-workers, you can either turn off the sound completely or choose a quieter or shorter duration sound.

1. Choose **Edit / Sound**, then
2. Turn off the micropause sound using the check box
3. or, choose a different **Start** and/or **End** sound

**Note:** If you turn off the sound, make sure you keep the visual warning turned on.

---

## Fine tuning rest breaks

Although rest breaks are important, you can be more flexible with the times you take them. The problems you may have are:

- Rest breaks occur too often
- Rest breaks are too long
- Too many rest break pop-up warnings
- Rest breaks interrupt me, or stop me from working
- Rest breaks are at inconvenient times
- I never get a rest break



## **Rest breaks occur too often**

This means the **rest break interval** may be too short. To fix:

1. Choose **Edit / Break timing**
2. Increase the **Rest break interval**
3. Press **OK**

**Note:** Rest breaks are recommended to be a minimum of 5 to 10 minutes every hour or 10 to 15 minutes every 2 hours.

---

## Rest breaks are too long

This means you may need to change the duration of the rest break To fix:

1. Choose **Edit / Break timing**
2. Decrease the **Rest break duration**
3. Press **OK**

**Note:** Rest breaks are recommended to be a minimum of 5 to 10 minutes every hour or 10 to 15 minutes every 2 hours.

---

## Too many rest break pop-up warnings

WorkPace advises you to take a rest break several times before giving up. To change the number of times it reminds you:

1. Choose **Edit / Warning configuration**
2. Reduce the **Pop-up warnings number** for the rest break
3. Press **OK**

## Rest breaks interrupt me, or stop me from working

Although you may find rest breaks annoying at first, you should learn to organise your work such that you can spend the rest break time doing a different, non computer related activity. However, if you wish, you can reduce the warning level to minimise interruption.

1. Right click on the WorkPace icon in the System Tray
2. Choose **Edit / Warning configuration**
3. Either
  - Choose a lower warning **Preset**
  - Turn on the rest break **Ignore** button if it is off
  - Turn off **Insist** if the **Ignore** button is already on
4. Press **OK**

## Rest breaks are at inconvenient times

If a rest break is due a few minutes before a normal break, such as lunchtime, it is sensible to wait until it actually is lunchtime before stopping work. WorkPace thinks so too, and will try to align rest breaks with your normal daily breaks if you set up the **Timetable**.

1. Choose **Edit / Timetable**
2. Setup the timetable
3. Make sure the timetable **on/off** box is checked
4. Make sure the **Align rest breaks with timetable** option is on
5. Press **OK**

Using the timetable means that WorkPace will try to align your breaks up with the events in your timetable. For example, instead of telling you to take a rest break at 12:20 PM, WorkPace will wait until 12:30 PM when your lunch break is due.

## **I never get a Rest Break**

This may mean that you are already spending lots of short breaks away from the computer, which is excellent. However, you can also decrease the rest break interval or decrease the rest break duration to make rest breaks occur more often.

You can also take rest breaks whenever you like by pressing the rest break button in the status window, you by pressing **Rest Break Now** from the WorkPace icon menu.

## Fine tuning the exercises

There are numerous ways you can adjust the exercises, see "[Exercise Setup](#)". The following list of common problems may also help.

- I never get any exercises
- I don't like the exercises I get
- The exercises are too long (or too short)
- There are too many exercises (or too few)

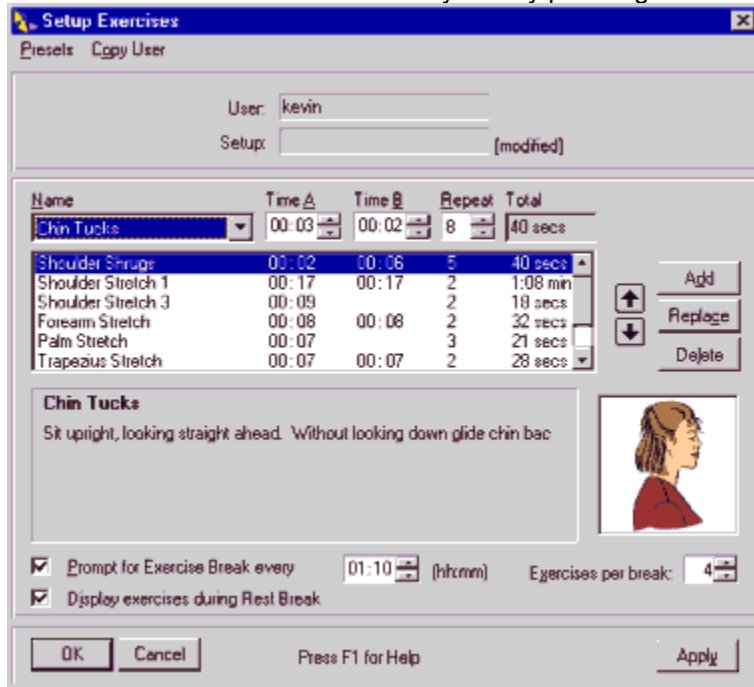
## I never get any exercises

WorkPace normally displays the exercise window when a rest break occurs (this can be enabled/disabled from the "[Exercise setup window](#)"). You are also prompted to do exercises regularly according to the "[Prompt for Exercise Break every...](#)" value in the [Exercise setup](#).

There is consequently several ways in the "[Exercise setup window](#)" to adjust how often you are prompted with exercises.

1. Make sure that the "[Prompt for Exercise Break every...](#)" option is On
2. Reduce the "[Prompt for Exercise Break every...](#)" value
3. Make sure that "[Display exercises during Rest Break](#)" option is On
4. Decrease the **Rest Break interval** in the [Break Timings setup window](#).

You can also do some exercises at anytime by pressing the Exercise button



in the status window, or choosing

**Exercise Now!** from the WorkPace icon menu.

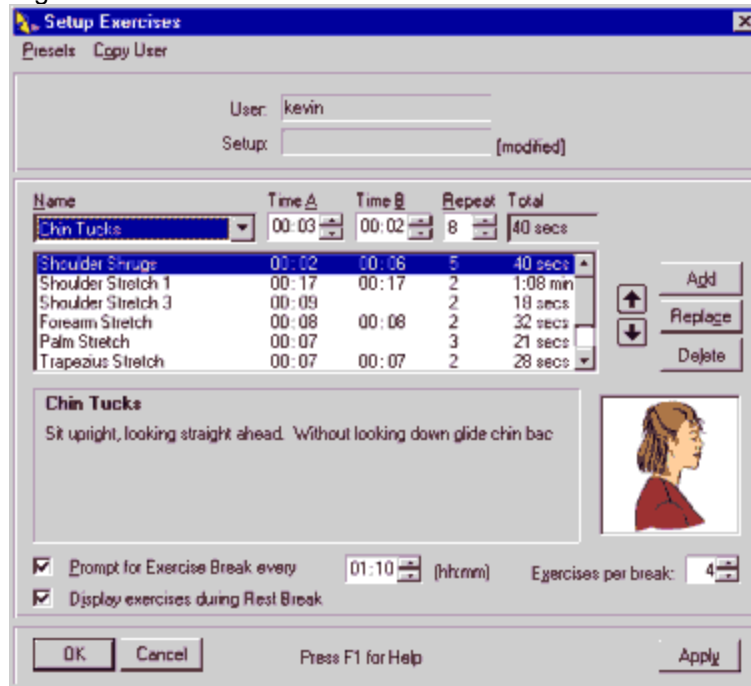
For more information on how/when exercise breaks appear see "[Using WorkPace - Exercises](#)".



## I don't like the exercises I get

You can change the selection and order of exercises in the "Exercise Setup window".

1. Right click on the WorkPace icon



(in the Windows System

- Tray) to display the WorkPace menu
2. Choose **Edit / Exercises**.
3. Change the selection of exercises using **Add/Delete**, and the order using the Up / Down arrows.
4. Press **OK**

## The exercises are too long (or too short)

You can change how long each exercise is displayed for (and how many repeats) through the "Exercise Setup window".

1. Right click on the WorkPace icon

Name	Time A	Time B	Repeat	Total
Chin Tucks	00:03	00:02	8	40 secs
Shoulder Shrugs	00:02	00:06	5	40 secs
Shoulder Stretch 1	00:17	00:17	2	1:08 min
Shoulder Stretch 3	00:09		2	18 secs
Forearm Stretch	00:08	00:08	2	32 secs
Palm Stretch	00:07		3	21 secs
Trapezius Stretch	00:07	00:07	2	28 secs

(in the Windows System

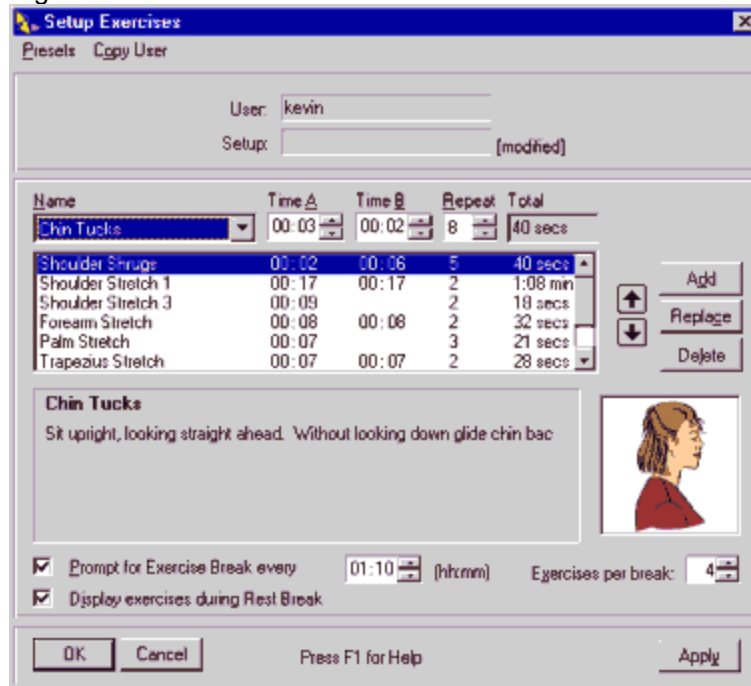
Tray) to display the WorkPace menu

2. Choose **Edit / Exercises**.
3. Select the exercises you wish to change, and adjust the **Time A**, **Time B**, and **Repeat** values

## There are too many exercises (or too few)

Change the number of **Exercises per break** in the "Exercise Setup window".

1. Right click on the WorkPace icon



(in the Windows System

- Tray) to display the WorkPace menu
2. Choose **Edit / Exercises**.
3. Adjust the **Exercises per break**

## Fine tuning the daily limit

Computer work can be very demanding on the mind and body, and limiting the level of usage per day is strongly recommended. The problems you may have are

- Daily limit warning appears too early
- Daily limit window locks up the computer

## Daily limit warning appears too early

Either try to reduce the amount of computer work you do each day, or you increase the allowed **Daily limit**.

1. Select **Edit / Break timing**
2. Increase either the **Daily usage** or **work** limit.
3. Press **OK**

**Note:** The stop work warning may appear earlier than normal if you have worked extra time on a day earlier in the week. If this is the case then you may wish to increase the **Weekly usage** or **work** limits instead.

---

## Daily limit window locks up the computer

The daily limit window will always lock up the computer, however you may turn on the ignore option to allow you to keep working. This button can be pressed to give you extra time if you need to work late on a few days.

1. Choose **Edit / Warning configuration**
2. Turn on the Daily limit **Ignore** button
3. Press **OK**

## Fine tuning the typing speed limit

Excessive typing rates are a major contributing factor to RSI, and it is recommended that you keep your typing speed below 60 words per minute, especially if you are feeling any discomfort or pain. The problems you may have are

- Typing speed warnings appears too often
- Typing speed warnings lock up the keyboard

## Typing speed warnings appears too often

If you find you are warned regularly at your normal typing speed you may need to increase your base typing speed limit.

1. Select **Edit / Typing speed limit**
2. Increase the **keystroke limit**
3. Press **OK**

Alternative you can increase the warning threshold and rewarn interval.

1. Select **Edit / Typing speed limit**
2. Move the monitoring slider control further to the left
3. Press **OK**



## Typing speed warnings lock up the keyboard

WorkPace only locks up the keyboard when you type too quickly if the **Insist** option is on. To fix:

1. Select **Edit / Warning configuration**
2. Turn off the typing speed **Insist** option
3. Press **OK**

## Fine tuning the status window

The status window displays information on upcoming breaks and limits and is described in detail in section "Status window". The problems you may have are

- Status window blocks my view
- Status window keeps moving behind other windows
- Status window has disappeared
- Status window activity lights are annoying

## Status window blocks my view

If you find the status window is blocking your view of the application you are working with, you may

1. Move the status window. Simply drag the window to the location you wish to have it. WorkPace will automatically keep track of its location and place it there next time you use the computer
2. or, change the size of the status window by pressing the buttons located in the top right corner of the status window
3. or, turn off the **Always in front** option. Select **Edit / Options** and make sure the **Status window always in front** option is *not* ticked
4. or, close/quit the status window.

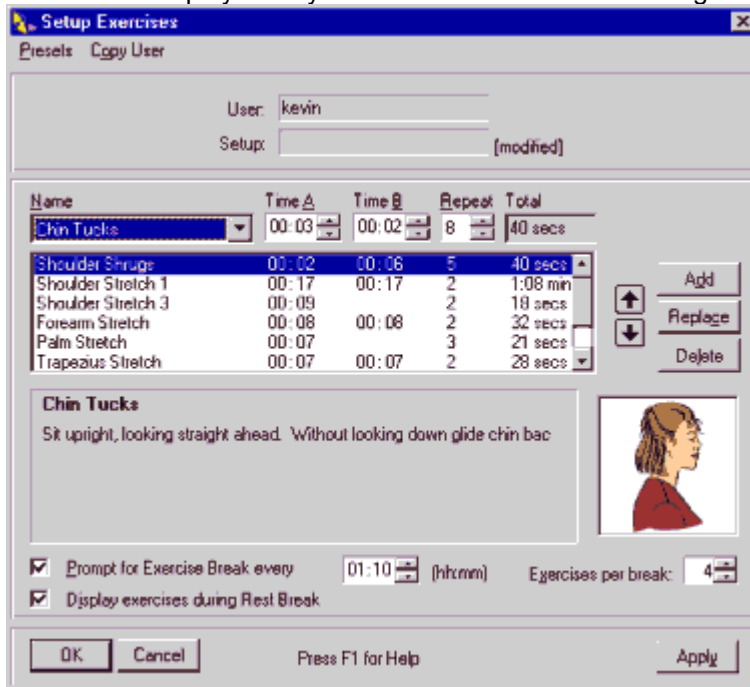
## **Status window keeps moving behind other windows**

If you prefer to be able to keep an eye on the information contained in the status window you can make the status window always remain in front:

1. Select **Edit / Options** and tick the **Status window always in front** box.

## Status window has disappeared

Either the status window has been closed completely, or it is behind another window. Note that the status window is displayed only when WorkPace is in monitoring mode, i.e. when the WorkPace Clock



icon is rotating. To start WorkPace choose **Start Monitoring** from the WorkPace menu. To make the status window re-appear:

### 1. Choose **View / Status window**

To make sure the status window remains visible, select the **Status window always in front** option from the **Edit / Options** menu.

## **Status window activity lights are annoying**

If you find the flashing of the WorkPace activity lights distracting, you can turn them off from the **option window**

1. Select **Edit / Options**
2. Unselect the **activity lights on** option

## Fine tuning miscellaneous features

Listed below are other adjustments to WorkPace you may wish to make.

- Pop-up warning window blocks the menu
- I would like WorkPace to start monitoring as soon as it is run

## Pop-up warning window blocks the menu

If you find the pop-up warning blocking a menu or a button of an application underneath, you may either:

1. Move the mouse over the centre of the pop-up window. It will automatically move out of the way
2. or, select **Edit / Warning configuration**
3. Turn off the appropriate pop-up window
4. Press **OK**



## **I would like WorkPace to start monitoring as soon as it is run**

WorkPace has the option of starting to monitor as soon as it is run. To turn on this option

1. Select **Edit / Options**
2. Tick the option **Autostart**

# Setting up your work area

It is important for your workplace to be comfortable. An incorrectly set up work area may contribute to back problems, muscular complaints, OOS, visual fatigue, tiredness and reduced efficiency. Each person is physically different, and there is no such thing as one set up suitable for everyone. Therefore your work area needs to be built around you. Listed below are the key points for correctly setting up your workplace. The information has been compiled from "*Healthy computing: A self help guide for visual display operators*", by Dr. Ross Mills and covers the following topics

- Chair
- Posture
- Footrest
- Desk
- VDU screen
- Copyholder

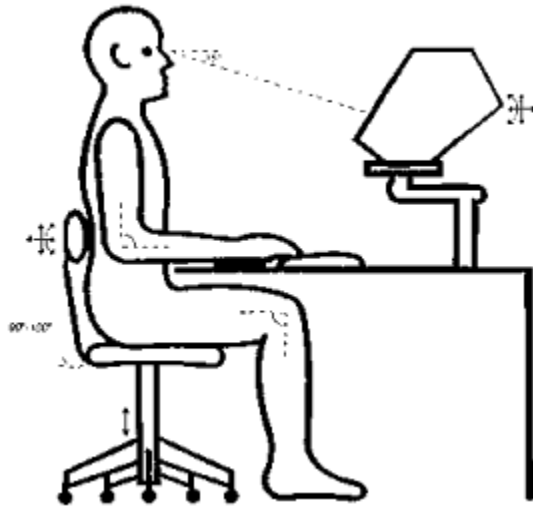
More information may be available from the WorkPace website, [www.workpace.com](http://www.workpace.com), under the **More on OOS/RSI** section.

## Chair

The chair is the most important item of all. A good chair should have

- Adequate clearance for thighs beneath work surface
- An adjustable backrest
- An adjustable seat height
- Mobility
- A stable base (five legs)
- Breathable upholstery

The following is an illustration of how to sit to best sit in a chair:



*An example of good sitting posture*

Try to maintain right angles in: knees, upper legs and elbows and shoulders. Note however that this picture is a guideline only - a comfortable and workable posture is the most important thing. Always avoid tense body postures.

## Posture

Good posture reduces unnecessary strain on the back and supporting muscles. Make sure you try have

- shoulders low and relaxed
- elbows tucked in
- wrists straight (a forearm rest helps)
- the hollow in the base of the spine and try not to lean forward when you operate your computer
- trunk upright to 30 degrees leaning back
- thighs horizontal
- knees at 90 degrees
- upper arms vertical to 20 degrees forward of vertical
- forearms horizontal to 20 degrees below horizontal
- screen to eye distance 3 times the width of screen or about arms length
- looking slightly downwards
- If you want to look down, do so by tucking in your chin in, and not by bending your head forwards

**Note:** These are a guideline only. It is far more important to be comfortable and relaxed than it is to conform perfectly to the textbook.

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## **Footrest**

Sit at your chair with your feet flat on the floor and your thighs horizontal (you may need to adjust the seat height to do this). Measure the gap between the upper surface of the thighs and the bottom edge of the desk. The footrest height should be 25 mm less than this distance. Ideally it should be at least 400 x 400 mm in area. This is to allow room for both feet to be on it at any one time. The closer you can place it to the chair the better. It should be stable so that it doesn't rock. Sometimes an up slanted footrest may be more comfortable than a flat one. If you are using a slanted one, it is preferable for it not have more than a 10 degree slope on it.

## **Desk**

A good desk should

- have plenty of room for keyboard and mouse in front of computer
- not be too shallow - should allow screen to be pushed back to arms length from the edge of the table
- give enough clearance for legs and thighs
- be stable

For reading and writing, a slightly sloping desk can be better than a flat desk.

## VDU screen

Your VDU screen should

- be positioned such as to minimise reflective glare
- have dark letters on a bright background
- be cleaned regularly to avoid build up of dust and finger marks
- have clean crisp characters with good contrast and in focus

For more information on setting up your VDU screen correctly, see the section on "*Visual Fatigue*".

## Copyholder

A good copyholder should

- have the copy placed at right angles to your line of sight
- be place beside the screen at same height and distance. Alternatively place just below screen sloping upwards
- be close to VDU screen
- preferably be retractable/moveable
- keep document stable and near vertical



# RSI and its Prevention

For more detailed information on RSI / OOS see the section "*More on OOS / RSI*" on the WorkPlace Website [www.workpace.com](http://www.workpace.com)

What is RSI?

RSI/OOS - the name

Who can get RSI?

Types of RSI

Symptoms of RSI

What Causes RSI, And How Is It Treated?

Medical explanation of the cause of RSI

How is RSI treated?

Preventing RSI

Correct keyboard usage

Correct mouse usage

Visual fatigue

## What is RSI ?

Repetitive Strain Injury (RSI) (or Occupational Overuse Syndrome (OOS)) are names given to a group of conditions that arise due to physical overuse of muscles and tendons. These conditions are characterised by discomfort or pain in the muscles and/or tendons, with or without physical signs of injury. RSI is not a new problem, as a quote from Ramazzini in 17th century his book *De Morbis Artificum* shows.

*"Various and manifold is the harvest of diseases reaped by certain workers from the crafts and trades they pursue. All the profit that they get is fatal injury to their health, mostly from two causes.*

*The first and most potent is the harmful character of the materials they handle.*

*The second, I ascribe to certain violent and irregular motions and unnatural postures of the body, by reason of which, the natural structure of the vital machine is so impaired that serious disease gradually develop therefrom."*

In more recent times other names have been given to conditions now under the umbrella of RSI/OOS. These include "writers cramp", "washer woman's wrist", "fisher woman's finger", "scriveners palsy", "tennis elbow", etc.

RSI/OOS - the name

Who can get RSI?

Types of RSI

Symptoms of RSI

## RSI/OOS - the name

RSI/OOS is still not well understood, and the common causes of the range of conditions are only recently being identified. An indication of present confusion is shown by the range of names used for RSI. The most commonly accepted medical term is currently *work related musculoskeletal disorders* (WMSDs). In many ways the term RSI is inappropriate for many of the conditions, which do not necessarily have repetition as a main cause and are often not *strains* or *injuries* in the strictly medical sense. For this reason the name Repetitive Strain Injury is no longer the favored term. New, and presumably less misleading terms are now used by professionals working in this field. Unfortunately, there does not appear to be an internationally agreed term as yet. Instead each country has a different name, with some of these being listed below.

<b><i>Term used for RSI</i></b>	<b><i>Country</i></b>
Occupational Overuse Syndrome (OOS)	NZ
Repetitive Strain Injury (RSI)	Worldwide
Work Related Upper Limb Disorder (WRULD, ULD)	UK
Cumulative Trauma Disorder (CTD)	USA
Carpel Tunnel Syndrome (CTS)	USA
Occupational Cervico-Brachial Disorder	Japan
Muscle-Tendon Syndrome	Finland
Musculo-skeletal Injury (MSI)	Canada

RSI is also often referred to as wrist/elbow strains or sprains.

## **Who can get RSI?**

RSI can occur in many different occupations:

- Cleaners
- Shearers
- Freezing workers
- Hairdressers
- Clerks
- Musicians
- Librarians
- Computer operators

Repetition is obviously a common factor amongst these occupations. A second, and perhaps more important factor is that all these occupations involve activities which require a constrained posture i.e. a fixed position of the body held for long periods of time and involving large amounts of static muscle load.

## Types of RSI

RSI/OOS consists of a range of quite different conditions which can be grouped into three categories.

<b>Localised inflammations</b>	<b>Compression syndromes</b>	<b>Pain syndromes</b>
Trigger finger	carpel tunnel syndrome	Chronic pain syndrome
de Quevian's tenosynovitis	thoracic outlet syndrome	myofascial syndromes
tenosynovitis	radial / ulnar nerve compression	fibromyalgia
epicondylitis		regional pain syndrome
rotator cuff syndrome		complex regional pain syndrome
bursitis		reflex sympathetic dystrophy
cervicothoracic dysfunction		
postural syndromes		
muscle strain		

These are taken from New Zealand ACC publication *Prevention of Occupational Overuse Syndrome - A handbook for co-ordinators of workplace OOS prevention programmes* ISBN 0-478-10246-1)

In many cases someone suffering from RSI will have more than one of these conditions (e.g. tendinitis and myofascial pain syndrome). These conditions have also commonly been grouped into type I and type II RSI.

## **Type I RSI**

These conditions are quite well understood medically. In type I conditions it is usually possible to find some physical sign of tissue injury. The conditions this group includes are:

- Carpal tunnel syndrome
- Tendonitis
- Writer's cramp
- Tennis elbow
- Rotator cuff syndrome
- Trigger finger
- Bursitis

as well as a range of other known and named conditions.

## Type II RSI

The *diffuse* condition - usually has specific areas of tenderness on the muscles (often referred to as *trigger points*). The physical injuries or dysfunction behind this condition are, as yet, poorly understood medically.

There is considerable overlap between the two types and both may be present at once. Also one condition if untreated may progress to others.

**Note:** The diffuse conditions are actually far more common amongst computer users than once thought. They include back pain and generalised neck and shoulder pains. The localised conditions tend to be less common, particularly amongst computer users.

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## Symptoms of RSI

The symptoms of type I RSI (localised conditions) can vary depending upon the condition suffered. They can include:

- Pain
- Inflammation
- Swelling
- Pins and needles, tingling and numbness
- Loss of coordination of an affected limb

The symptoms of type II RSI (the diffused condition) can often be similar to those of type I, pain however is almost always an important symptom. Symptoms are:

- Pain
- Stiffness
- Fatigue
- Muscle weakness
- Hot and cold feelings
- Presence of specific tender points in some muscles

In advanced cases the conditions can cause considerable personal stress, and lead to a loss in the ability to relax the muscles properly. Advanced symptoms can include:

- Insomnia - poor sleeping patterns
- Depression
- Raynauld's phenomenon (mottling on hands and sensitivity to hot and cold)
- Irritable bowel syndrome
- Fibromyalgia



## What Causes RSI, And How Is It Treated?

A number of aspects are thought to contribute to the development of RSI complaints. These include:

- Holding muscles tense for a long time
- Poor or constrained posture
- The repeated use of forceful movements
- Stress
- Working long hours without breaks
- A personal tendency to work hard

These physical causes of RSI usually result from work factors such as

- Poor ergonomics - workspace not set up correctly
- Badly designed working regime - too little work variation, too few breaks
- Poor working technique - using mouse or keyboard incorrectly
- Social, work, and personal problems - lead to increased stress

Unfortunately it is often the best, and most conscientious workers who are most at risk. One popular medical explanation for the development of RSI is described here .

Medical explanation of the cause of RSI

How is RSI treated?

## Medical explanation of the cause of RSI

*Muscles and tendons get blood through capillaries passing between the muscle fibres. A tense muscle squeezes on these vessels and they collapse, slowing the flow of blood. Blood flow restriction begins when the muscle exerts 5% of full power, and is stopped completely at 50% of full power.*

*When blood flow stops, the muscle has enough stored energy to cope with brief periods of tension. When this is used up, the muscle switches to an inefficient form of energy supply. However this is quickly exhausted and leads to a buildup of acid wastes in the muscle (lactic acid). These acid products cause pain and fatigue in the muscle. This pain and fatigue is similar to that felt when lifting weights at the gym.*

*The muscle pain can cause neighbouring muscles to tense up in sympathy by a reflex reaction (called the splinting reaction). This is a normal reaction to injury, and is good where bracing is needed for acute injuries like a broken bone, or an infection. In overuse syndrome, however, a self-sustaining pain cycle can develop. This pain fluctuates in intensity, from being mild to intolerable. The pain can also migrate from one part of the affected limb to another. Over time the muscles can become hyper-sensitive, with pain being caused by relatively low levels of activity, and the muscles developing specific tender points (myofascial trigger points).*

*An inadequate blood supply to nerves may also cause numbness and tingling. If larger nerves passing between muscles are squeezed, more definite tingling and numbness may result.*

Unfortunately this explanation is not yet completely agreed upon by many medical experts, and likely does not represent the full picture.

See the [WorkPace Website](#) for more technical information on RSI/OOS causes and treatment.

## How is RSI treated ?

The treatment of the localised conditions depends upon the exact condition, but it includes:

- Rest
- Anti-inflammatory medication
- Steroid injection
- Ultrasound
- Splinting
- Physiotherapy
- Massage therapy
- As a last resort surgery

For the diffuse conditions a rather broader range of treatments can be used, with many applied concurrently

- Rest
- Relaxation training
- Stress counselling
- Massage therapy
- Acupuncture/acupressure
- TENS
- Postural improvement
- Aerobic exercise
- Strengthening exercises
- Muscle and nerve stretches
- Medication for depression or insomnia
- Trigger point deactivation - cool and stretch, trigger point injection, dry needling
- Improvement of working techniques

Note that almost all computer users suffering from localised conditions will also be suffering to one degree or another from the diffuse condition also. In the past many problems amongst computer users have been incorrectly diagnosed. For example, true CTS is actually very rare amongst computer users. However, until recently carpal tunnel surgery was one of the most common treatments for computer related RSI. Not surprisingly the long term success rate of this surgery was not high.

See the WorkPace Website or more information on RSI treatment and rehabilitation techniques.

## Preventing RSI

This section explains how to prevent RSI and should be read in conjunction with the section "*Setting up your work area*".

Correct keyboard usage

Correct mouse usage

## Correct keyboard usage

Using the keyboard with good technique can have a significant impact on both productivity, and the likelihood of developing problems.

The key points for good keyboard technique are:

- A good quality keyboard
- Positioning of keyboard and forearm rest
- Usage of a forearm rest
- Typing style

For information on changing some of the keyboard settings to assist in good keyboard technique see the section "*Change your settings*".

### **A good quality keyboard**

Often this point is overlooked these days. Computers are constantly improved, but keyboards are mass produced as cheaply as possible. If you do a lot of typing it is well worth paying extra for a good durable keyboard. Keyboards made by Digital, IBM and Compaq are often of much higher quality. The average person may be unable to detect a difference, but to an experienced typist it will be very noticeable. A good quality keyboard will be:

- Separate from monitor (portable computer keyboards are not generally good for long typing)
- Fairly thin, less than 25mm from table top to top-of-spacebar
- Keys should have a smooth, positive feeling travel
- Key movement should not be "mushy"
- Keys shouldn't stick or wobble
- SHIFT, CTRL, and ALT keys should be on both sides

**Note:** The Microsoft keyboard should not by any means be seen as the 'ideal' ergonomic keyboard.

## Keyboard position and the forearm rest

A forearm rest can be useful to take the weight of your arms off your shoulders, with the forearm rest being placed directly in front of the keyboard.



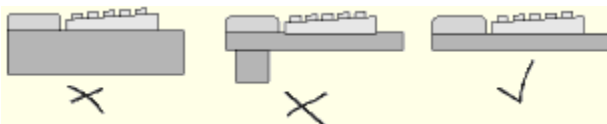
*Correct positioning of forearm rest*

The requirements for a forearm rest are:

- Wider than keyboard
- 10-15 cm deep
- Rubber feet or non-sliding under surface
- Soft non-stick top surface
- Top of rest should be level with top of spacebar
- Front of rest flush (in line) with edge of table
- Forearm rest directly in front of keyboard - no gap in between

The keyboard itself should be as flat as possible, or sloping away from you. Keyboards that slope up tend to promote bending of the wrists. Any feet at the back of the keyboard should be folded away to eliminate the slope. These feet and the common sloping aspect of many keyboards is a hangover from old mechanical typewriters. The slope on these existed for mechanical, not ergonomic reasons. Some people actually find typing most comfortable with the keyboard on their knees.

Make sure your desktop is not too thick, and doesn't have a bar underneath it.



This allows you to get above the keyboard, without having your legs squashed under the table. Many computer desks have a separately adjustable keyboard section, made of thin wood. Make sure there is enough room for a forearm rest on this.

**Note:** Most people tend to sit too low at their keyboard. Try raising your chair a few inches so you can drop your shoulders and keep your forearms parallel to the floor.

---

## Using the forearm rest

Using a forearm rest properly requires practice and takes time to get used to. The key points are:

- Take off any watches, bracelets etc. that are on your wrist
- Drop your shoulders and rest the full weight of your forearms on rest
- Make sure arms can move smoothly and easily on forearm pad
- Move hands from elbow - pretend your wrists are immovable

The key point to good forearm rest technique is moving your hands from your elbows and shoulders. There is often a tendency to leave the forearms in one place on the rest, then bend the wrist and hands to reach the keys. This *must* be avoided. Practice by pretending your wrist and hand is in a straightjacket and can't be moved sideways or up and down. When you are used to this, leave the wrists and hands relaxed, making all movement from the elbows. A good forearm rest surface is important for allowing this. Bare skin will stick to a forearm rest if it has a shiny smooth surface. Wear a shirt, jersey or top that extends to your wrists, or alternatively place a piece of material on the rest. Experiment until your forearms move smoothly and easily whilst sitting on the rest.



## **Typing style**

A number of style points are noted below.

- Don't bend your wrists sideways
- Let your elbows swing freely
- Keep your fingers in a curve
- Don't bend your wrists upwards too much
- Keep your thumbs relaxed
- Keep 4th and 5th finger relaxed
- Don't slap the keys - use finger press, not tapping action with hand and wrist

Lastly and most importantly, try to type with rhythm, using smooth elegant movements.

## Correct mouse usage

The key points for a mouse are:

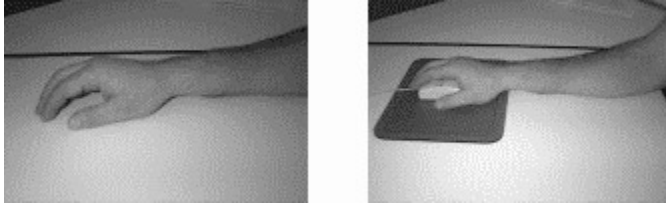
- Comfortable size to fit your hand
- Buttons should be angled
- Speed of mouse pointer on screen should not be too high
- Buttons should not be difficult to press
- Mouse should be cleaned inside regularly
- Use a mouse pad
- Use a forearm rest
- Don't hold mouse with thumb and little finger

Topics on mouse usage are

- Holding the mouse
- Moving the mouse
- Changing the response of the mouse
- Changing the mouse speed settings
- Using the mouse buttons
- Clean the mouse and pad regularly
- Forearm rest and mouse pad
- Ergo-rest®
- Mouse design / type
- Mouse alternatives

## Holding the mouse

A good size and shape for a mouse is one that fits comfortably under your relaxed hand.



### *Correct positioning of hand to hold mouse*

Cup your hand, then place your cupped hand and forearm on the table, face down. Completely relax your fingers, so that your whole arm is relaxed. As shown above this is the position your hand should be in when holding the mouse. This means that the mouse should be smaller than your hand, and quite low. It should be just big enough that the weight of palm rests on the mouse, the fingers should be relaxed with the middle finger resting on the mouse buttons. The buttons should not be so sensitive that resting the fingers on them causes them to depress.

The mouse should be moved using the weight of the palm. Don't actually "hold" onto the mouse with the fingers, especially avoid holding with the thumb and little finger. Ideally you should relax the fingers such that the thumb and little finger aren't even touching the sides of the mouse.

This position allows you to "hold" the mouse without any static muscle tension, simply by the weight of your hand. Many people squeeze or clench the mouse, perhaps scared that if they let go it will run away!

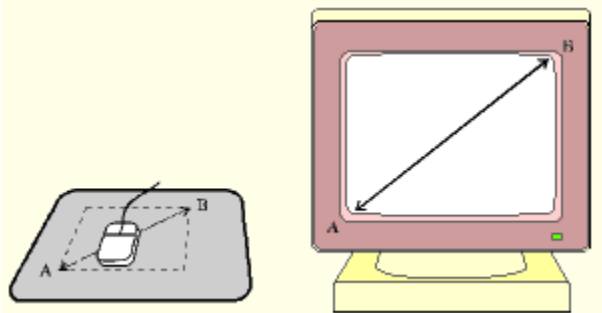
### **Moving the mouse**

As with the keyboard, pretend that you cannot move your wrist. Instead move the mouse from your shoulder and elbow. Pretend your forearm and hand are completely passive and must be pushed and pulled around by your upper arm. This approach ensures that you use the large fatigue resistant muscles in your shoulders and upper arm, instead of the tiny muscles in your hand and forearm.

This method takes some practice and may feel difficult at first, due to the coarser coordination of your arm muscles.

## Changing the response of the mouse

One of the main reasons for tension in the arm when using the mouse is the speed setting of the mouse. Many systems default to quite a high speed setting, meaning that the entire screen may be only 1 inch or 2.5 cm wide on the mouse pad. Imagine trying to select a button, position some text or draw an accurate diagram on a screen this size. As far as your mouse is concerned each screen pixel may be only 1/30th mm (33 millionth of a metre) across. It is advised that you remove any acceleration options, and choose one of the lowest speed settings. A good guideline is that your screen should be approximately 1/3 to 2/3 the size of your mouse pad, i.e. moving the mouse pointer from one side of the screen to the other means moving the mouse across 1/2 to 2/3 the width of the mouse pad.



This corresponds to a mouse screen of 10-15 cm wide ( $3\frac{1}{2}$  times larger). This slowing of the mouse should help to force you to use your whole arm to move the mouse, instead of twisting the wrist and moving the fingers. Generally speaking the lower the mouse speed and acceleration the lower the stress on your arm.

To change your mouse speed see "[Changing the mouse speed](#)" or "[Change your settings](#)".

### Changing the mouse speed settings

1. From the **Start** menu on menu bar choose **Settings / Control Panel**
2. In the **Control Panel** double-click on the **Mouse**
3. Select the **Motion** Tab
4. Move the **Pointer speed** slider to **Slow**
5. Press **OK**

**Note:** If you have a proprietary mouse driver installed, (e.g. Microsoft IntelliPoint) these instructions may not be correct.

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For more information see the section "*Change your settings*".

## Using the mouse buttons

With your fingers relaxed and resting lightly on the buttons you should be able to *pull* the button down. Think of *pulling* instead of *pushing* the button, and use the middle of each finger, instead of pushing with the end. Curved or slanting buttons placed towards the end instead of the top of the mouse are better.



Wrong



Right

*Correct way to hold the mouse*

Flat buttons on top tend to promote the curling of the fingers above the button. Instead of using the index finger on the main button, try using the middle finger. Your middle finger is the strongest and placing it on the main button puts your hand in a better position on the mouse.

**Clean the mouse and pad regularly**

Natural oils from your hands, combined with dust and dirt from the air will eventually collect on your mouse pad and inside the mouse. Eventually this will cause erratic operation of the mouse. Every couple of months or so you should clean the mouse pad and inside the mouse. Often these can contain thick layers of dirt. To clean the mouse remove the ball then use a cloth to clean the rollers (usually 3 of them).



### Forearm rest and mouse pad

It is important to have plenty of room for the mouse and your forearm. This is a common mistake with the mouse being placed at the edge of the desk. This allows no room to rest the forearm. The result is that the user rests the arm on the wrist at the edge of the table and pivots the mouse from the wrist.



Right



Wrong

#### *Correct and incorrect placement of mouse*

This is not good for the hand or wrist. As a guideline the mouse should be placed 20-30 cm into the work space (not just next to the keyboard), and should have plenty of room to move around. A forearm rest can be used for the mouse as well as the keyboard. Either use a separate one, or use a combined one, a forearm rest much larger than the keyboard.

The mousepad should ideally be raised to the level of the keyboard keys (or just below). This can only be done if a fore-arm rest is being used in which case use packing under the mouse pad to raise it.

### **Ergo-rest®**

Even better than a forearm rest is the Ergo-rest®, a moveable arm rest. This is used by the author, whose workplace set up is shown in the diagram below.



*Keyboard, forearm and mouse rest arrangement used by author*

The advantage of the Ergo-rest® is that the mouse can be placed near the edge of the table with full support still being given to the forearm. The rest also allows smooth, virtually frictionless movement of the mouse from the elbow and shoulders.

Note however that the Ergo-rest® is not necessarily recommended for keyboard use. With a keyboard the wrist is no longer supported and the Ergo-rest® allows users to 'bounce' the wrists when typing - a bad movement for the arm muscles. If a moveable arm rest is used it is very important to adjust its height correctly - its surface should be a little higher than the top of the pad.

## Mouse type/design

There is quite a range of mouse designs and types available now. Some fairly well-known types are:

- The Contour mouse
- Colani contoured mouse
- Microsoft ergonomic mouse
- Goldtouch mouse

Many designs (such as the Microsoft mouse) offer very little difference from conventional designs. Others, such as the Colani mouse (a favorite of the author) are quite radically different, designed to fit to the hand and to prevent many of the bad habits mouse users can develop (e.g. gripping the mouse too hard).

At present it is very much up to personal preference with no one design being universally agreed upon as superior. The best advice is to try out several and then stick with the one you prefer (taking into account, of course, all the advice about mouse usage given in previous sections). Note that a more expensive mouse is not necessarily a better one.

Note also that to get the most out of a quite different style of mouse it is usually necessary to make some changes to the way you use the mouse.

For an excellent source of further information on the many mouse types available see the Typing Injury FAQ

*[www.tifaq.com/mice.html](http://www.tifaq.com/mice.html)*

## Mouse alternatives

There is now quite a range of alternatives to the common mouse. Some of these are listed below with comments on their advantages and disadvantages.

**Trackball:** Less precise control than a mouse. The fine movements required with the fingers and thumb can cause problems.

**Pressure point:** A small rubber knob often used on laptops. As with the trackball this device is usually less precise than a mouse and requires continuous finely controlled tension in the fingers.

**Touch pad:** This is a small touch sensitive pad that you move a finger around on. Mouse clicking can be simulated by tapping the finger. As with the previous two devices the touch pad also requires very fine finger movements, and is less precise than using a mouse. The larger the pressure pad the better, as this gives you more room to move your fingers.

**Stylus pad:** This is similar to the touch pad, but uses a special stylus or pen. This pointing device can offer quite precise control and has the advantage of allowing a familiar pen holding hand position.

**The keyboard:** Yup, the keyboard too is a mouse alternative, and can be a very efficient alternative. See the section on [Windows Shortcut Keys](#) for more details.

Overall, in the opinion of the authors, a mouse is still the preferred pointing device -- when used with good technique. Most other alternatives to the mouse still require very fine precise finger movements combined with continuous muscle tension in hand. If a mouse is used in accordance with the advice given in previous sections on mouse usage, then much of this muscle tension can be minimised allowing a standard mouse to cause the least strain on your hand.

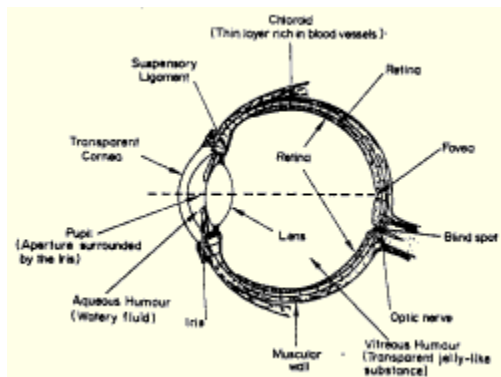
This said, some people having problems caused by mouse usage may find some of the alternatives beneficial. However, do beware that *all* pointing devices can potentially cause the same problems. Ultimately, the best answer is to use pointing devices less, and, of course, to take micropauses.

For an excellent source of further information on mouse alternatives see the Typing Injury FAQ

[www.tifaq.com/mice.html](http://www.tifaq.com/mice.html)

## Visual fatigue

The eye is an amazingly complex device that we use continuously to take in enormous amounts of information. It is not surprising that long hours spend continuously concentrating on detailed information on a computer screen can, when combined with some of the unique requirements of VDU work, lead to eye problems.



Visual fatigue and eye problems are commonly encountered when doing continuous VDU work. There are a number of factors associated with VDU work which are particular causes of eye strain and visual fatigue.

- The fixed focal length between the eyes and VDU
- Screen flicker
- Air-conditioned environments
- Screen reflections and mismatches between VDU brightness and general illumination levels
- The size and quality of displayed text

A number of studies have shown that the average blink rate when using a VDU can be as little as 1/2 to 1/3 the normal rate. This reduced blink rate combined with the drying effect of air-conditioned environments can quickly lead to eye irritation. There is also the suggestion that the drying out of the eyes caused by these effects may be responsible for the impaired vision that some computer users complain of. Drying of the surface of the eyes can cause a slight change in the eyes curvature, changing the focus of the eye whilst working at the computer in a way that may require the person to wear glasses whilst using the VDU.

Other studies have reported that the number of very small movements our eyes make when scanning or reading text (called *saccades*) is doubled when reading from VDUs (as opposed to reading text on paper). This means that your eyes are having to work twice as hard to read the same information. Perhaps this is part of the reason why the paperless office has never arrived! Many people feel more comfortable printing something out onto paper before reading it, rather than simply reading it off the VDU.

So, why do VDUs seem to cause all these visual problems? See these topics for some answers and tips on preventing eye problems.

The screen refresh rate

Contrast and clarity

Lighting

Eye exercises

Tips for avoiding eye fatigue

## The screen refresh rate

Our eyes are capable of detecting flicker (i.e. a flashing light) at up to rates of 100 -- 120 times a second. This effect is most noticeable in your peripheral vision which is quite sensitive to flicker -- try looking at your VDU out of the corner of your eye and you will likely notice the flicker. Most VDUs have a default refresh rate of only 60 Hz -- this means that the screen information is re-displayed 60 times a second. This slow refresh rate can produce a very significant level of flicker which may confuse the tracking mechanisms in your eyes. The end result is that the lower the refresh rate the more difficult text becomes to read on the VDU.

Research into these effects has come to the conclusion that refresh rates should actually be around 100 Hz to avoid having any flicker effects [see *Ergonomics in Computerized Offices*, 1987, E. Grandjean]. Unfortunately, very few VDUs are capable of this refresh rate as yet, although many can now go as high as 85 Hz.

For information on changing the refresh rate of your VDU see the section "[Change your settings](#)".

## **Contrast and clarity**

Another factor that affects the ease of reading on a VDU is the clarity of the text and the brightness settings of the VDU. A good quality VDU is very important -- cheaper models may produce fuzzy characters, poor contrast and can have mis-alignment of the colours. All of these effects can contribute to more difficult reading and eye strain. It should be noted that normal printed text has very high contrast (black on white) and normally has very sharp clarity -- no fuzzy edges or colours. Printed text also does not suffer from jitter or small movements of the text, which can sometimes occur on VDUs if they are not adjusted correctly, or are exposed to electro-magnetic interference.

## Lighting

Our eyes can adapt to a very wide range of illumination, the difference between full sunlight and a dimly lit room is a factor of nearly 100,000! When adapted to a particular illumination level, however, our eyes only respond to a narrow range of brightness. This is why headlights that seem blinding at night may be barely noticeable on a sunny day.

When reading a book we are seeing reflected light meaning that the brightness of a page automatically adjusts to the surrounding illumination levels. A VDU's brightness is, however, completely independent of the surrounding illumination. The range of brightness available from a VDU is also very restricted -- try reading your screen in direct sunlight -- no matter how high you turn the brightness control it will be unreadable.

For these reasons it is important to match the room illumination to the VDU brightness (and vice versa). It is also important to avoid any bright lights in your field of view -- especially a window with bright light coming through it. Otherwise, your eyes will have a continual conflict between adapting to the bright light and to the relative dimness of your VDU.

It is because of these factors that designing lighting for environments with VDUs is quite different to designing for other types of work. Normally any direct outside light sources must be avoided.



## **Eye exercises**

Some people find eye exercises useful to relieve eye strain. In our opinion strengthening eye exercises can be beneficial, but they should not be done whilst working otherwise they are simply likely to contribute to eye fatigue. Practice eye exercises when you are not at work (i.e. when you have not been working at a VDU).

## Tips for avoiding eye fatigue

### The VDU

For information on changing the refresh rate of your VDU see the section "[Change your settings](#)".

- Use a good quality VDU with good clarity. A good VDU, just like a good quality mouse and keyboard is more important than a expensive CPU -- you may spend many thousands of hours each year interacting with these devices. If text on your VDU is fuzzy, low contrast, or the colours are mis-aligned, or the picture wobbles/crawls get your VDU adjusted, fixed (or replaced).
- Use as high a refresh rate as possible (see the section "[Change your settings](#)" for information on changing the refresh rate). Ideally the refresh rate should be at least 75 Hz non-interlaced.
- Never use an interlaced screen mode -- this causes the appearance of distracting horizontal line flicker.
- Adjust the brightness and contrast settings to get the best picture. If you do a lot of word processing it is often good to turn the contrast up high and the brightness down low to maximize the contrast between text and background.
- If text is too small to read comfortably increase the font/display size. This can be done from the Windows **Control Panel / Display / Settings** (see "[Change your settings](#)"). Most software also allows you to change default fonts/sizes -- if you have any trouble with this ask an expert for assistance.
- When working your face should be at least an arms length from the front of your VDU. If you have difficulty reading text at this distance change the font/window sizes (see above).
- Make sure you have no reflections on the screen. If there are reflections try tilting the screen slightly or else try to remove, shift or shield the light source (e.g. close curtains, place cover over a light, etc.).
- If you use a VDU for long periods and have bi-focal glasses you should ideally get a second pair of glasses specifically for VDU use (ask your eye specialist about this). Reading a VDU with bi-focals can quickly cause neck and eye problems due to the need to tip the head back to read the screen. If you can't get special glasses then at least lower the VDU by 10 cm or so.
- Never place your VDU so that you are placing an unshielded window (i.e. a window not covered by blinds or curtains). If possible avoid any windows in your field of view when using the VDU.
- Always use dark (black) text on a white background.

### When using your VDU

- It is best to avoid any direct sunlight in the room (even though it may be very pleasant with the sunlight streaming in it is normally not possible for the brightness of your VDU to compete).
- Old fluorescent lights can begin flickering. Don't put up with this, get them replaced.
- Avoid being in a draft or very close to any air-conditioning outlet -- this can dry out your eyes.
- Remember to blink (not necessarily an easy thing to keep reminding yourself about : ) )
- Periodically look away from the screen at something far away, particularly during micropauses (e.g. look out a window to your side, or look at something across the other side of the room).
- Periodically (during micropauses and rest breaks) close your eyes and try to relax your face and eyes.
- Don't spend long periods at the VDU without breaks away doing alternative activities. These breaks (i.e. rest breaks) give your eyes a rest from the VDU as well as your body a rest from typing and mouse work. We particularly want your eyes to have a break from the fixed focal length involved in looking at the VDU.
- Drink lots of water during the day. This helps to prevent dehydration that can result from air-conditioned environments. It is generally held that we do not drink enough water (as different

to coffee, tea, or Coke!)

# Exercises

This selection of exercises is aimed at stretching and relaxing the muscles in your upper body i.e. your face, neck, shoulders, arms, and hands. These exercises are automatically displayed on-screen for you by WorkPace, as well as being available through the WorkPace online help.

**Warning:** Some exercises, if done incorrectly, may aggravate existing problems, or even cause injury. If you have any preexisting injury, or are unsure about any exercise please seek qualified medical advice beforehand.

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[Hints on doing the exercises](#)

[Micropause and Relaxation Exercises](#)

[Neural \(nerve\) Stretches](#)

[Trapezius exercises](#)

[Shoulder Exercises](#)

[Neck \(cervical\) Exercises](#)

[Forearm Exercises](#)

[Hand Exercises](#)

[General Exercises](#)

[Design of exercises and exercise regimes](#)

## Hints on doing the exercises

- Exercises and stretching should never cause any pain. If any pain occurs stop the exercise. One of the most common causes of discomfort can be overstretching or overdoing the exercise - always exercise gently.
- Stretches should always be done gently and gradually.
- Try holding stretches for up to 30 seconds - this gives the muscles more time to relax fully.
- Try taking a deep breath before the stretch, then exhaling and relaxing into the stretch.
- Try to become more aware of your body and the pleasant feeling of the muscles being gently stretched. It is often good to experiment a little with the exercise, adjusting the position so as to get the best stretch.
- Closing your eyes can help you concentrate on the stretch.
- It is very important not to over stretch i.e. not to pull too much. Over stretching can cause the muscle to tense up instead of relaxing. Just go to the point where you can feel a stretch and hold it in that position.

## Micropause and Relaxation Exercises



### Micropause Stretch and Relax

Excellent micropause exercise. Lean right back in your chair looking towards the ceiling. Drop your arms at your sides and rotate them outwards, palms facing up, thumbs out. Feel a stretch across your chest and shoulders. Breathe in, and then exhale and relax into the second position with shoulders dropped, eyes closed and arms hanging loosely. Remain relaxed until micropause is over (5-10 secs).

### Arm Shakes

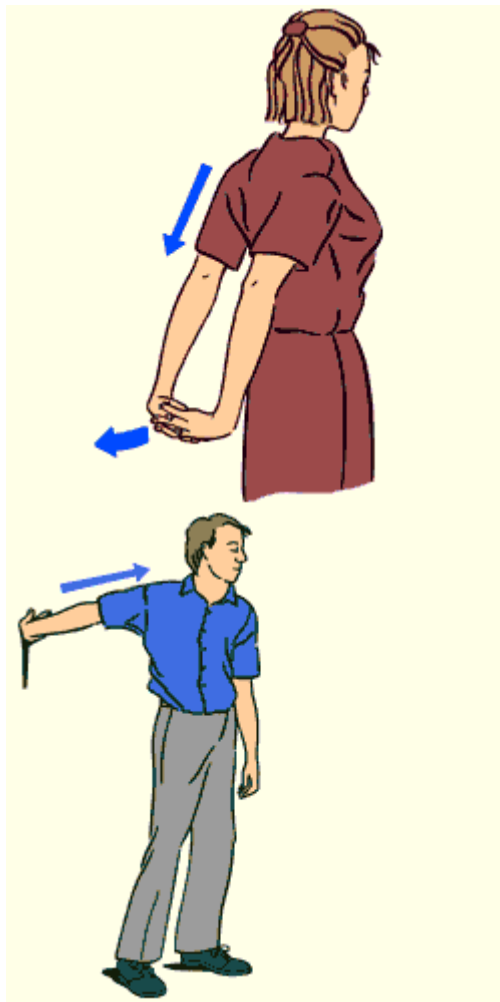
Drop shoulders and let your arms hang loosely. Gently shake wrist and arms for **count of 6**, then stop and relax. Repeat several times.



### Forward Lean

Rest elbows on the thighs. Let hands hang loosely. Relax shoulders, close your eyes and breathe deeply. Stay relaxed for **3-4 breaths**.

## Neural (nerve) Stretches



### Shoulder Stretch 3

Stand up and clasp your hands behind your back. Move your shoulders back and down as far as possible. *Hint:* Try and pull your shoulders down and in towards your spine. Hold for **10 counts**. Repeat several times.

### Arm Stretch 1

**Note:** Be careful with this exercise and only go until you just feel a stretch. Stand up and place palm on wall with fingers pointing away from you. Turn head and body away from wall. This stretches all the way from the fingers, through the forearm and shoulders, to the neck. To increase the stretch look down and turn your head away. Repeat several times with each arm.



### Arm Stretch 2

Stand facing a wall. Place your hand onto the wall and try to get your palm flat, with fingers pointing upwards, your elbow straight. Hold for **20 seconds**. Repeat with alternate arms (Note: This is basically an easier version of Arm Stretch 1).

## Trapezius exercises



### Trapezius Stretch

Sit upright and place one hand on your head. Turn your head sideways and bend your neck over to look down at the floor until you feel a stretch along the back of your neck and the top of your shoulder. Gently pull further with your hand if needed to feel the stretch. Hold for **15 seconds**. *Hint:* Try to put your nose in your armpit (hold your breath if needed). Repeat each side.



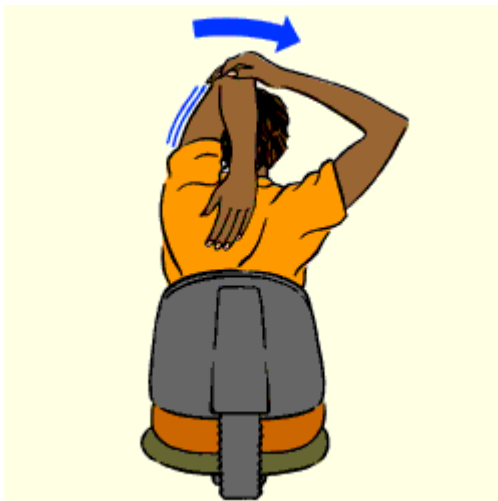


### **Shoulder Shrugs**

Standing or sitting drop your hands loosely at your sides. Shrug your shoulders up then let them relax down as far as possible. Repeat several times. This exercise helps to counter our normal tendency to hunch our shoulders when working.



## **Shoulder Exercises**



### **Shoulder Stretch 1**

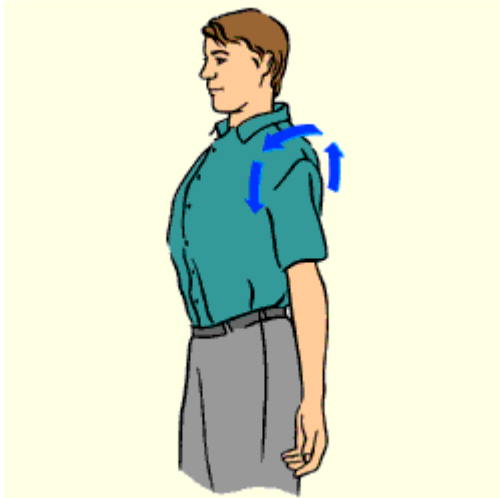
Put one arm behind your head with the palm touching your back. Hold onto your elbow with the other hand and gently pull across and down. Go to the point where you feel a stretch in your shoulder and upper arm and hold this position. Repeat both sides several times.

### **Shoulder Stretch 2**

Hold one arm straight across your body. Use your other arm to



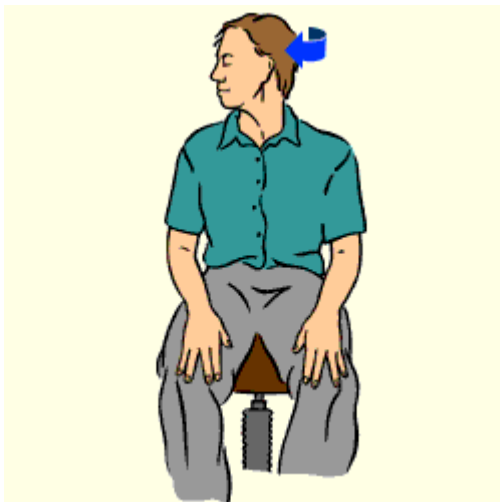
gently pull the straightened arm closer to you. When you feel a stretch across your upper arm and shoulder hold this position. Repeat both sides several times.



### Shoulder Rolls

Hang arms at side with shoulders relaxed. Slowly roll shoulders around in as large a circle as possible in a backwards direction. Do about **10 circles**.

## Neck (cervical) Exercises



### Head Turns

With a slight chin tuck slowly turn head to one side and hold. Go to the point where you feel a stretch down your neck and shoulder and hold for the **count of 5**. Return to the middle position and repeat to the same side several times. Then do the other side.



### Head Forward

Bend your head forward until you feel a stretch. Use your hands to pull your head further forwards if necessary, to feel a stretch.



### Head Back

Support your head with one hand. Slowly tip your head back to look towards the ceiling. Pause for **count of 2** then return to start position - looking forward..



### Neck Side Stretch

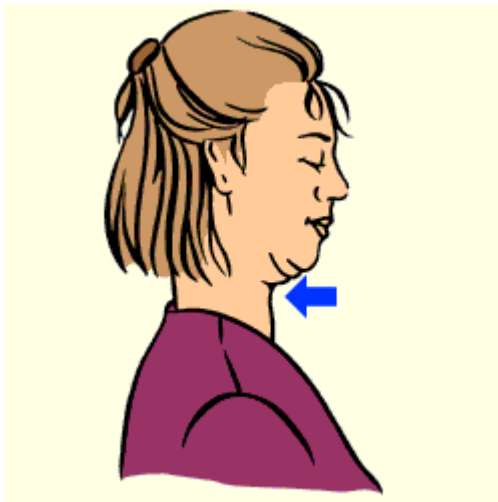
Sitting upright hold onto your seat with one hand. Gently tip your head over to the side until you feel a stretch down the side of your neck and shoulder. *Hint:* Use your other hand to gently pull further if needed to feel the stretch. Hold for **count of 5**. Repeat several times on each side.

### Chin Tucks

Sit upright, looking straight ahead. Without looking down



glide chin backwards to make a double chin. Make sure that you keep looking straight ahead - don't tip your head up or down. Hold for **count of 5**. Repeat several times.



## Forearm Exercises



### Chicken Stretch

This stretches the forearms. Put both hands under your arms - the backs of your hands in your armpits. Gently push on your hands until you feel a stretch in your forearms and over the back of your hands. *Hint:* don't make clucking noises at the same time or you may get some funny looks .



### Forearm Stretch

Hold one arm straight down in front of you with the palm facing out, elbow straight. With other hand gently pull palm and wrist back until you feel a stretch along the underneath of your forearm. Hold for **10 seconds**. Repeat on both sides several times.



### Hands Behind Head

Put hands behind your head. Lean back in your chair and pull your elbows back until you feel a stretch through your elbows, arms or hands. Hold for **count of 10**. Repeat several times.



### Wrist Turns

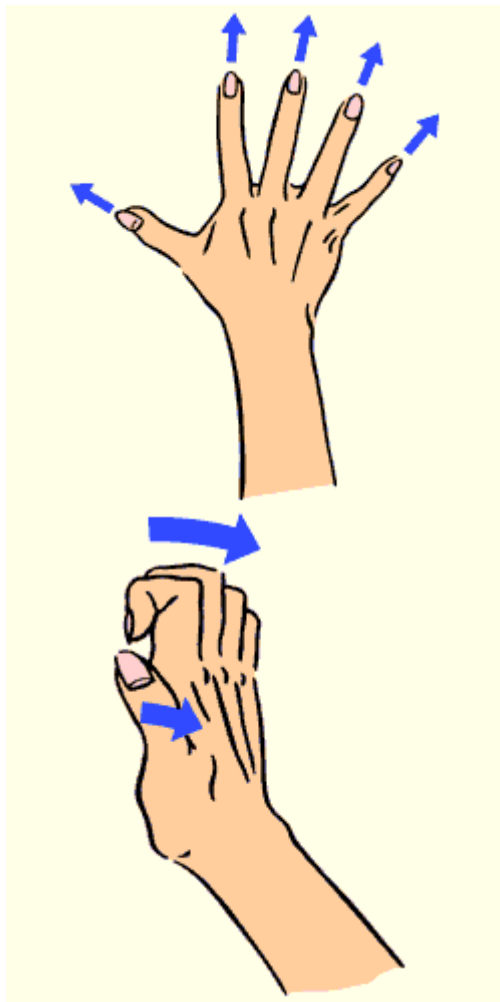
Sitting upright with arms hanging loosely. Turn wrists as far as possible in one direction until a gentle stretch is felt. Hold for **count of 5**, then turn wrists in the opposite direction and hold. Repeat in both directions several times.



### Hand and Finger Stretch

Clasp fingers together with palms away from you and then straighten your arms until you feel a stretch across your wrists, palms and fingers. Hold for **count of 8**. Relax and repeat.

## Hand Exercises



### Finger Spreads

Rest arm on desktop or thighs. Stretch fingers apart as if trying to make them longer. Hold this for **count of 3**, then relax. Repeat several times with each hand.

### Palm Stretch

Bend fingers and thumb so that tips of fingers are just touching top of palm. Now pull fingers and thumb backwards as far as possible feeling a stretch across your palm. Hold for **count of 5**. Repeat alternate hands several times.

## General Exercises



### **Back Stretch**

Stand with feet slightly apart. Place hands on back of hips with palms supporting your lower back. Gently lean back until you feel a stretch in your lower back. Hold for count of 5 and repeat several times.

**Warning:** Skip this exercise if you have any pre-existing back problems.



### **Showground Clown Stretch**

You may get some funny looks from people doing this, but it is an excellent stretch for all those tight facial muscles. Open mouth and lips as wide as possible, simultaneously raising your eyebrows as high as possible. Hold for **count of 5** and repeat a few times.

## **Design of exercises and exercise regimes**

These exercises and the WorkPace exercise regimes have been specially designed and approved for use by computer users. This was achieved with the assistance of consulting Occupational Health Physiotherapist Nicola Green.

Nicola Green is a consulting Occupational Health Physiotherapist and a practising musculo-skeletal physiotherapist in Christchurch, New Zealand. She was trained at the Otago School of Physiotherapy, Dunedin, New Zealand, graduating in 1992 and has practised in New Zealand, the United States and the United Kingdom. Nicola completed the Advanced Certificate of Occupational Health Physiotherapy at the University of East Anglia, Norwich, England in 1997 and is a Licensed Physical Therapist in the states of Illinois and Michigan, USA. She is also a member of the New Zealand Society of Physiotherapists and the New Zealand Ergonomics Society..



# System administrator Mode

WorkPace has a special System Administrator mode that provides access to advanced settings such as setup locking, error logging, disabling of usage statistics recording and user setup file autosaving. This mode also gives the system administrator full access to all user's setups and usage statistics. This means that under a central user directory installation (Option 1) the system administrator has full access to *all* user setups, not just the currently logged in user.

As an example of the use of this mode if a user's setup is locked normally then by logging in as system administrator you will automatically bypass the locking and have full access to changing the user's setup, creating new users, and deleting users. Of course, when you log out as system administrator all the normal settings will apply again.

Logging in

Logging out

Overriding a user password

Setting the System Administrator password

User Settings

Global settings

Lock Modes

Usage Statistics

Auto Save of user setup files

Errors

Selecting a user

Creating a new user

Deleting a user

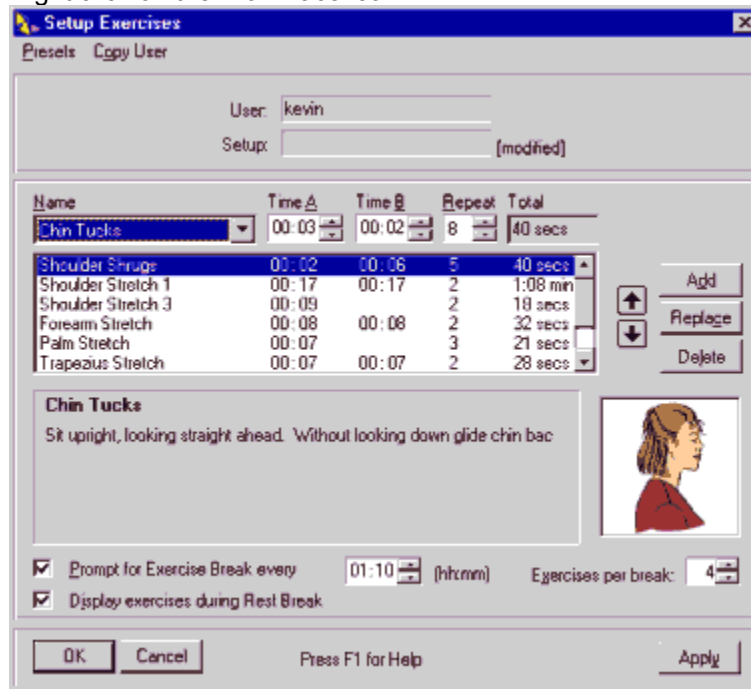
Editing a user's setup

Usage Statistics (monitoring data)

## Logging in

To enter the System Administrator mode you must "log in":

1. Right click on the WorkPace icon



(in the Windows System

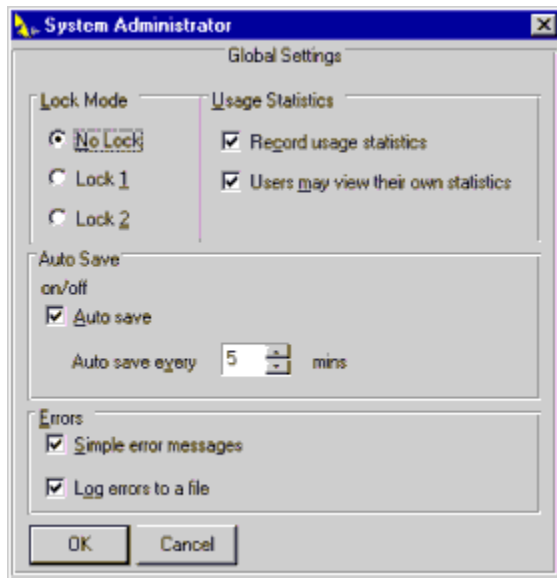
Tray) to display the WorkPace menu

2. Select **Edit / Sys Admin**. You will be prompted to enter the System Administrator password
3. Enter the password. Note: If you are not asked to enter a password then there may be no password set. See "[Setting the System Administrator password](#)".

The main WorkPace window will appear and you are now in the System Administrator mode, which is indicated on the main window by the words "SYSTEM ADMIN MODE" written in blue.

## Global settings

The Global Settings window, which is shown below, contains a range of settings which are all stored in the sysadmin.ini file. The sysadmin.ini file and the Global Settings are intended to apply to all users. However, in practice this is only the case for the central network installation (network install Option 1). For the central network installation there is only one copy of sysadmin.ini stored in the central directory. Thus, any changes made to the Global Settings, or sysadmin.ini will automatically apply to all WorkPlace users. This is one of the reasons why the central user directory installation is recommended.



*System Administrator Global Settings window*

For any other network installation option (or for stand-alone installation) the sysadmin.ini is stored on each computer, meaning that changes to the Global Settings will only effect users on the current computer.

Global Settings can be overridden for individual users through the "User Settings".

The Global Settings consist of several groups of parameters:

- Lock Mode
- Usage Statistics
- Auto Save of user setup files
- Errors

## Lock Mode

WorkPace has two lock modes called "Lock 1" and "Lock 2" that restrict the user's options, and an "No Lock" mode which allows full use of WorkPace. The following table describes the options available to the user under each of the lock modes

	No Lock	Lock 1	Lock 2
Standby	Yes	No	No
New user	Yes	No	No
Delete user	Yes	No	No
Exit WorkPace	Yes	No	No
Setup parameters	Yes	Yes	No
Set Password	Yes	Yes	Yes
User options	Yes	Yes	Yes
Change user	Yes	Yes	No
Anonymous user	Yes	No	No

### *User options under each lock mode*

Both lock modes 1 and 2 ensure that WorkPace is always monitoring the current user. The important difference between lock 1 and lock 2 is that lock 2 does not allow the user to edit their setup or to change user.

The globally set lock can be overridden for an individual user by changing the "[User Settings](#)".

Note that the WorkPace "[Options](#)" are not affected by locking i.e. users can still change the settings for font size and status window attributes. However, under Lock 1 and 2 the setting of the **Autostart User** option is ignored i.e. WorkPace will always start, regardless of this setting.

## Usage Statistics

**Record Usage Statistics:** Determines whether usage statistics (monitoring data) are recorded in the user setup file. Recording of usage statistics is normally on by default.

**Allow users to view their own data:** Enables/disables the **View / Usage Statistics** menu option i.e. it determines whether users can view their own recorded usage statistics.

## Auto Save of user setup files

**Autosave** allows the enabling/disabling of the autosave of user setup files, and adjustment of the **Autosave Interval**.

A user's setup and usage statistics are automatically saved when the WorkPace software is quit, or the user's setup is changed. However, if WorkPace or Windows is closed without a proper exit (e.g. a system crash), then the most recent monitoring information may be lost. To avoid this WorkPace automatically saves the data to disk regularly. How regularly is determined by the Autosave Interval set in the Global Settings window (see above).

The user file is approximately 40kB in size and autosaving will cause no performance problems on most PCs when WorkPace setup files are stored locally on the computer. If WorkPace setup files are stored on the network (Options 1, 2) then the autosave function may generate unwanted network traffic. If this is a problem the Autosave Interval should be increased to say every 60 mins. Alternatively Autosave can be turned off.

## Errors

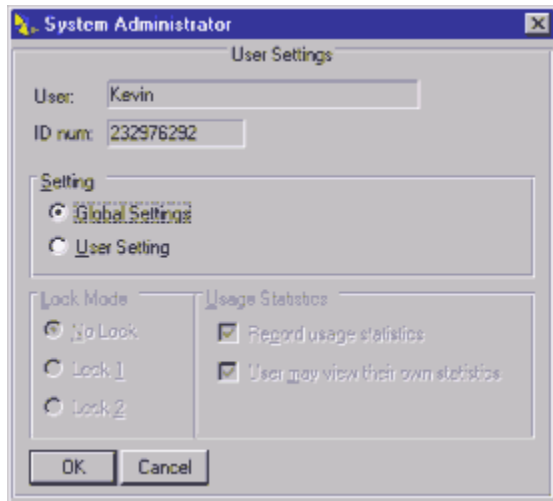
**Log Errors:** If this is selected then error information (e.g. corruption of user pointer file, or user setup file) is logged to the file specified (e.g. *WorkPace.err*) in the local Windows directory (e.g. C:\Windows). Errors are still displayed on screen when error logging is disabled.

**Simple Error Messages:** If selected then the detailed messages sent to the log file are not necessarily displayed to the user, or, are displayed in a simplified form. This can be useful for avoiding complex error information being presented to non-technical users. For example, a simple error message might say "*An error has occurred loading your user setup file, please contact your System Administrator*", whilst the full details of the error are recorded in the error log file.

Global lock setting may be overridden for individual users through the "*User settings*" window.

## User Settings

It is possible to override the Global Settings for individual users by use of The User Settings. The User Settings window is shown below.



*System Administrator User Settings window*

These settings, unlike the Global Settings, only apply to a particular user (the user shown in the User Settings window). For an explanation of the different settings see the section on "[Global Settings](#)".

By using the Global and User Settings in combination it is possible to set a general profile for most users with the Global Settings, and then make exceptions for some users by changing their User Settings. For example, you may want most users on Lock 1 (must run WorkPace, but can change their settings), but wish to put some users on a Lock 2 (cannot change any settings). Similarly, you could choose not to record usage statistics for most users, then change the User Settings for several users so as to record statistics for just these users.



## Selecting a user

The steps involved in selecting a different user depend on how WorkPace is installed.

### Stand-alone Installation, Network Option 1, Option 3, Option 4

For Network Option 1 all user setups will be accessible after System Administrator log on. For the other installation options only the users whose user setup files are on the current machine (commonly in the directory *C:\Program Files\WorkPace\User*) will be accessible. To select the desired user (before perhaps editing the user's setup) simply use the pull down **User** list box in the centre of the main WorkPace window.

### Network Option 2

For this installation option each user's user setup file is stored in their own personal network directory. This means that to be able to select a user you must first change the *User Directory* to their personal network directory. For example the directory of the user John Smith may be *\\Server\Staff\Jsmith*. Hence you must set the current *User Directory* to this directory.

1. Select Sys Admin \ User Directory
2. Select the path for the user's network directory (e.g. *\\Server\Staff\Jsmith*)
3. You will see the user setup file belonging to this user appear in the **Files** window.
4. Close this window and return to the main WorkPace window. You should now see this user shown on the **User** pulldown list,

Repeat these steps to select different users.

## Creating a new user

The steps to create a new user setup depend on how WorkPace is installed.

### **Stand-alone Installation, Network Option 1 (no user pointer files), Option 3, Option 4**

1. From the main WorkPace window select **User / New** and follow the usual instructions for "Adding a new user".

### **Network Option 1 (with user pointer files), Option 2**

Since under these options WorkPace stores the user setup files (or user pointer files) in the personal directory of the user, you must first set the *User Directory* to the root directory of the user whom you are creating a setup for. For example the directory of the user John Smith may be `\Server\Staff\Jsmith`. Hence you must set the current *User Directory* to this directory.

1. Select Sys Admin \ User Directory
2. Select the path for the user's network directory (e.g. `\\Server\Staff\Jsmith`)
3. Press the button **Create ...\workpace\user** such that WorkPace creates the directory `\workpace\user` to store the user files in.
4. Press **OK**. You are now returned to the main window
5. Select **User / New** and follow the instructions for "Adding a new user"

Repeat these steps for each user you wish to create a setup for.

## Deleting a user

The steps to delete a user's setup depend on how WorkPace is installed.

### Stand-alone Installation, Network Option 1 (no user pointer files), Option 3, Option 4

1. From the main WorkPace window select the correct user from the pulldown **User** list.
2. Select **User / Delete** to delete the user.

### Network Option 1 (with user pointer files), Option 2

Since under these options WorkPace stores the user setup files (or user pointer files) in the personal directory of the user, you must first set the *User Directory* to the root directory of the user whom you wish to delete. For example the directory of the user John Smith may be `\\Server\\Staff\\Jsmith`. Hence you must set the current *User Directory* to this directory.

1. Select Sys Admin \ User Directory
2. Select the path for the user's network directory (e.g. `\\Server\\Staff\\Jsmith`)
3. You will see the user setup file belonging to this user appear in the **Files** window.
4. Press **OK**. You are now returned to the main window
5. From the user list select the name of the user
6. Select **User / Delete**. This will delete both the user pointer file and the user setup file for this user.

## Editing a user's setup

Simply select the appropriate user (see "[Selecting a user](#)" and proceed to edit the users setup as normal, using the **Edit** menu options.

## Usage Statistics (monitoring data)

For information on the usage statistics see "*Usage Statistics*". .

## Overriding a user password

If a user has forgotten their password, the System Administrator may override it and change the password.

1. Login as System Administrator
2. Select the user for whom to change the password from the WorkPace main window
3. Select Setup / Set Password
4. Enter a new password, or select **No Password**

**Note:** Passwords are disabled under most network installation options.

---

## Setting the System Administrator password

You will have been prompted to choose a system administrator password when you first installed WorkPace. To change this:

1. Login as System Administrator
2. Select **Sys Admin / Set Password**
3. You will be prompted for the old password
4. Enter the new password twice (once in each box) and press **OK**

If the System Administrator password is forgotten then WorkPace will need to be re-installed, or you can enter your Registration Key as your password.

## Logging out

Once you have finished using the System Administrator mode, you must log out.

1. From main window select **Sys Admin / Logout**



# Appendix

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## Glossary

The following list gives brief explanations of terms used in conjunction with OOS and WorkPace.

**Break window:** The window displayed while you are taking a break.

**Daily limit:** A limit set on the time per day of computer use.

**Ignore button:** A button displayed on a break window allowing you to ignore that break.

**Insist option:** An option when selected makes WorkPace force you to the break.

**Micropause:** A short break of a few seconds taken every 3 or so minutes.

**OOS:** Occupational Overuse Syndrome.

**Pop-up window:** A small window warning you about a break or limit.

**Preset:** A built in and pre-defined set of configuration options.

**Rest break:** A period of time spent away from the computer, usually 5 minutes every hour.

**RSI:** Repetitive Strain Injury.

**Standby:** The mode in which WorkPace is not monitoring.

**Weekly limit:** A limit set on the time per week of computer use.

**Break window:** The window displayed while you are taking a break.

**Daily limit:** A limit set on the time per day of computer use.

**Ignore button:** A button displayed on a *break window* allowing you to ignore that break.

**Insist option:** An option when selected makes WorkPace force you to the break.

**Micropause:** A short break of a few seconds taken every 3 or so minutes.

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**Pop-up window:** A small window warning you about a break or limit.

**Preset:** A built in and pre-defined set of configuration options.

**Rest break:** A period of time spent away from the computer, usually 5 minutes every hour.

**RSI:** Repetitive Strain Injury.

**Standby:** The mode in which WorkPace is not monitoring.

**Weekly limit:** A limit set on the time per week of computer use.

## Example WorkPace Settings

The recommended minimum settings for WorkPace are shown in the table below.

Recommended Minimum Settings			
	Interval / Limit	Duration	Warning Configuration
Micropause	6-8 mins	5 secs	Ignore button OFF
rest break	1 hour	5 mins	Ignore button ON
daily limit	10 hrs <i>Work</i>		Ignore button ON
weekly limit	48 hrs <i>Work</i>		Ignore button ON
typing speed	OFF		

This setup is useful in providing an absolute minimum of disruption for all Users upon first rollout of WorkPace. However, it is not suitable for those already suffering from problems. These people's settings will normally need to be adjusted individually to suit with the help of a professional - the greater their problems the more strict the settings they will need.

The table below gives an example of some 'typical' rehabilitation settings for a User with Stage II OOS/RSI. In practice, as already stated, the settings should be adjusted further to suit the individual (and adjusted over time as their condition improves).

Example Rehabilitation Settings			
	Interval / Limit	Duration	Warning Configuration
Micropause	2½ mins	20 secs	Ignore button OFF
rest break	20 mins	10 mins	Ignore button OFF
daily limit	4 hrs <i>Usage</i>	(7 hrs <i>Work</i> )	Ignore button OFF
weekly limit	20 hrs <i>Usage</i>	(33 hrs <i>Work</i> )	Ignore button ON
typing speed	50 wpm*		Warn after typing for 10 secs too quickly

\* This setting is very dependent upon the person

## Windows ShortCut Keys

<b>Copy</b>	<b>Ctrl-C</b>
<b>Paste</b>	<b>Ctrl-V</b>
<b>Undo</b>	<b>Ctrl-Z</b>

Change Window Alt-Tab  
Quit Application Alt-F4

Use **Alt** key for characters in menus e.g. Eile Alt-F

### Formatting

Bold	Ctrl-B
Italics	Ctrl-I
Underline	Ctrl-U
Heading 1	Ctrl-Alt-1
Heading 2	Ctrl-Alt-2
Heading 3	Ctrl-Alt-3

### Deleting

Delete Prev Word	Ctrl-Bckspce
Delete Next Word	Ctrl-Delete

### Spreadsheets & Tables

Next cell	Tab
Previous cell	Shift-Tab
First cell in row	Alt-Home
Last cell in row	Alt-End
Top cell in column	Alt-PageUp
Last cell in column	Alt-PageDn

### Commands

Save	Ctrl-S
Print	Ctrl-P
Find	Ctrl-F
Go to last edit in Doc	Shift-F5
Check spelling	F7
Close sub-window	Ctrl-F4
Minimise	Alt, Space, N
Maximise	Alt, Space, X
Update all fields	Ctrl-A, F9

### Navigating

Use PageUp / PageDn *not* scroll bar

End of Line	End
Start of Line	Home
End of Document	Ctrl-End
Start of Document	Ctrl-Home
Move by one Word	Ctrl-←, →
Move by one Para	Ctrl-↓, ↑

### Selecting



Select All	Ctrl-A
Select a whole Word	Ctrl-Shift-←, →
Select a whole Para	Ctrl-Shift-↓,
Select to end of line	Shift-End
Select to start of line	Shift-Home

### **Useful Extras**

Try some of these

To change Caps select

some text and press Shift-F3

Superscript Ctrl-Shift=

Subscript Ctrl=

Page Break Ctrl-Enter

Close sub-window Ctrl-F4

Change sub-window Ctrl-Tab

## How to change your Settings

Run *Control Panel* from *Task Bar / Start / Settings / Control Panel*

### **Slow your Mouse down!                      reduce hand pain**

Slowing down your mouse greatly reduces muscle tension in your hand

1. In *Control Panel* double-click on *Mouse*
2. Select *Motion*
3. Under *Pointer Speed* move the slider    hard left to *Slow*
4. Press *OK*

### **Speed up your Keyboard!                      reduce arm pain**

Do less tapping on the arrow keys.

1. In *Control Panel* double-click on *Keyboard*
2. Push all sliders hard right
3. *Repeat delay* - Short, *Repeat rate* - Fast, *Cursor blink rate* - Fast
4. Press *OK*

### **Speed up your Screen!                      avoid eye strain**

Less screen flicker causes less headaches and reduces eye fatigue.

1. In *Control Panel* double-click on *Display*
2. Select *Settings*
3. Under *Refresh Frequency* select (and test) the highest rate your screen will work with (ideally 85 Hz, but at least 75 Hz)
4. Press *OK*

### **Want lots more space on your screen?      a bigger virtual desk**

This allows you to fit far more information on your screen.

1. In *Control Panel* double-click on *Display*
2. Select *Settings*
3. Under *Desktop Area* move the slider to the right to *800 by 600 pixels*. (If you have a 17 inch screen try *1024 by 768 pixels*)
4. Press *OK* to test. If test is successful keep new setting
5. Re-adjust size and shape of screen using monitor controls.
6. Change the Refresh Frequency to 70-75 Hz or higher (see above)
7. If text is too small then under *Font Size* choose *Large Fonts*
8. Press *OK*

## **The WorkPace Website - on-line support and more information on RSI**

If you have access to the Internet and the World Wide Web you may find some useful resources on the WorkPace Website:

*[www.workpace.com](http://www.workpace.com)*

The WorkPace Website has been designed to provide the following

- [Easy downloading of the latest version of WorkPace](#)
- [Online support -- answers to your questions](#)
- [Online ordering of WorkPace](#)
- [Information and articles on RSI/OOS](#)

## **Downloading the latest version of WorkPace**

The latest versions of WorkPace are available from the Website. By downloading WorkPace you can:

### **Trial WorkPace**

Anyone can download WorkPace and trial the software free for one month.

### **Obtain minor upgrades**

If you have a registered copy of WorkPace you will automatically be able to install and run minor version upgrades that are posted to the WorkPace Website. For example, if you have version 2.4, then you will be able to download any slightly later versions (e.g. ver 2.42) and your registration key will be valid for these versions. This means that you can take advantage of any bug fixes or minor improvements that are placed on the Website.

### **Obtain major upgrades**

If you have also purchased the WorkPace Upgrade and Maintenance Agreement you will, for the duration of the agreement, be able to download and install major upgrades of WorkPace as well. Thus, when a major new version is released (e.g. version 3.0) you can download this and install it using your current Registration Key. Holding a Upgrade and Maintenance Agreement also entitles you to priority support.

## **Online support**

If you have any problems with WorkPace, or comments on the product, the WorkPace Website allows you to obtain online support.

### **WorkPace InfoFAQ**

Try this first for answers to Frequently Asked Questions.

### **Feedback**

If you have any comments on WorkPace, things you don't like, or suggestions for new features then Niche Software welcomes your comments. You can send us such feedback via a special feedback form on the Website.

### **Support Queries**

If your question/problem is not answered in the WorkPace InfoFAQ then you can send a support request. This will be forwarded directly to your nearest Agent who will respond by either Email, phone or fax. When submitting a support request please be sure to give as many details as possible to allow the Agent to best assist you.

## **Online ordering**

If you wish to purchase WorkPace this can be done through online order forms on the WorkPace Website. However, these only cater for standard first-time orders. If you are wanting to upgrade WorkPace will purchase additional licenses you should contact your Agent directly to ensure you get the best prices.

## **Information and articles on RSI/OOS**

The More on RSI/OOS section on the WorkPace Website is intended as a general resource on the subject. It contains a number of sections dealing with a range of topics including:

- Explanation of RSI and the conditions encompasses
- Full online copies of several technical papers on RSI prevention and micropauses
- A personal story of successful RSI recovery, including a detailed description of rehabilitation techniques
- Excerpts from the WorkPace manual and online help (e.g. the information on correct mouse usage)
  - Links to other OOS/RSI related Websites.

## ***WorkPace.ini***

There will be a copy of the *WorkPace.ini* file on each computer on which WorkPace is installed. The main purposes of the information in this file are:

1. To tell WorkPace what type of installation it is running under, and, if a network installation, the correct paths for the WorkPace network central directory, and mapped user drive (if user pointer files are being used)
2. Under a stand-alone installation (i.e. not network), to allow WorkPace to remember who was last using the package. Thus when several users are setup on WorkPace the software can automatically start with the user who was last using WorkPace.



## Section [WorkPace]

Key	Options	Description
NetUserFileConfig	Central Network HardDrive WinDir	This decides where the user's setup/data files are stored (The 4 options available are equivalent to <u>network install</u> Options 1, 2, 3, 4).
UserPath	<i>PathName</i>	The path for the user files, or user pointer file (is ignored when logon name is used to find user file i.e. network install Option 1, no user pointer files). For a network install with user pointer files the UserPath might be <i>U:\WorkPace\user</i> where <i>U:\</i> is the mapped user Drive. Under a stand-alone installation the User Path will likely be <i>C:\Program Files\Workpace\user\</i>
CurrentUser	<i>FilePath</i>	The full path for the current WorkPace user file. Only used under stand-alone installation
FontSize	1, 2, 3	Size of WorkPace fonts and Windows. (See <b>Options / Font Size</b> menu)

## ***sysadmin.ini***

The *sysadmin.ini* file contains settings that are intended to apply to all users.

Under network install Option 1 with a central user setup file directory there will be only one copy of *sysadmin.ini* stored in the central directory. Thus the settings in this file will apply globally to all WorkPace users on the network. It is very important, consequently, that the *sysadmin.ini* file is given read permission only for all users.

Under all other installation modes (stand-alone, network install options 2, 3, 4) the *sysadmin.ini* will be stored with the WorkPace application files. This means that the settings in the *sysadmin.ini* will only apply to users on the current computer. (One good way to change the *sysadmin.ini* on multiple computers is to use the Auto Install feature to reinstall WorkPace on each computer and thus at the same time update the *sysadmin.ini*).

Most of the settings in *sysadmin.ini* can be accessed from the WorkPace **Sys Admin** menu when in System administrator mode. The parameters stored in *sysadmin.ini* are grouped into two sections [General], and [AutoSetup].

## Section: [General]

This information is applied globally

Key	Options	Description
UseLigonName	Yes No	Determines whether the user's log on name is used to tell WorkPace which user setup file to use. This is only relevant for a Central ( <u>Option 1</u> ) install. If set to No, then <u>user pointer files</u> will be used instead.
Password		Encoded system administrator Password <b><i>Cannot be edited directly</i></b>
LockLevel	NoLock Lock1 Lock2	Global Lock level
AutoSave	Yes No	Auto save user statistics?
AutoSavePeriod	<i>Integer</i>	Auto save period (minutes)
RecordUserStats	Yes No	Global Setting for Recording Computer Usage statistics
UserViewStats	Yes No	Global Setting for whether or not users may view their own usage statistics
ErrorSimple	Yes No	Display simple messages when errors occur?
ErrorLog	Yes No	Keep a log of errors?

## Section: [AutoSetup]

These settings are only relevant if a central user directory is being used (i.e. Network install Option 1)

Key	Options	Description
InitialSetup	Wizard Default File	How will the users' initial setup be determined?
InitialSetupFile	<i>Blank</i> <i>Filename.usr</i>	If InitialSetup=File then use this (central directory) setup file

## WPAuto.ini

Ahe *WPAauto.ini* file contains all the installation options for the automatic install of WorkPace. This file is created from the answers given when setting up the AutoInstall using the WorkPace installation Wizard, and is placed into the AutoInstall directory (e.g. V:\WPAuto).

If you wish to change the way the automatic install operates then you can either rerun the WorkPace installation Wizard, or you can edit the *WPAauto.ini* file directly.

The parameters stored in *WPAauto.ini* are grouped into three sections [Version], [Auto Install Options], and [Network].

## Section: [Version]

Changing the version information will cause the AutoInstall program to reinstall/upgrade WorkPace on all computers. For example, if you wish WorkPace to be reinstalled on all computers simply change the *InstallDate*. If this date is later than the previous install date on a particular computer then WorkPace will be reinstalled on this computer.

Name	Options	Description
Ver	<i>CurrentVersion</i>	This version number is compared with that installed on the local machine to do decide whether to install WorkPace
InstallDate	dd mmm yyyy	This is the date the auto install files were created. If this date is newer than the install date on the local machine, then WorkPace is re-installed. The format is dd mmm yyyy, where mmm is the three letter abbreviation (in English) of the month: e.g. jan, feb, mar, apr, may, jun, jul, aug, sep, oct, nov, dec.

## Section: [Auto Install Options]

Key	Options	Description
DoAutoInstall	Yes No	Determines whether AutoInstall is turned on or off
AutoNetworkPath	<i>PathName</i>	This is where the AutoInstall files are on the Network
AutoWorkPacePath	\$ ( <i>ProgramFiles</i> ) \\WorkPace\\	This is where WorkPace will be auto-installed to on the user's machine. \$( <i>ProgramFiles</i> ) denotes a variable that will be replaced with the Windows program files path.
AutoWP4DOSPath	<i>PathName</i>	This is where WorkPace for DOS will be auto-installed to on the user's machine
AutoWinStartup	No Auto Local	Will WorkPace be added to the Startup Directory on the user's machine? If so run local ver of WorkPace or run WPAuto.exe (allows for future automatic upgrades)
AutoWP4DOSAutoexe c	Yes No	Will WP4DOS be added to the autoexec.bat batch file?

## Section: [Network]

Key	Options	Description
NetUserFileConfig	Central Network HardDrive WinDir	This decides where the user's setup/data files are stored (The 4 options available are equivalent to <u>network install</u> Options 1, 2, 3, 4).
NetCentralDirectory	<i>PathName</i>	Full path of central directory if NetUserFileConfig = Central
NetMappedUserDrive	<i>Drive</i>	Drive letter of Mapped user directory if NetUserFileConfig = Network or if NetUserFileConfig = Central and UseLogonName = No
NetUserHardDrive	<i>PathName</i>	Full path of hard drive user file if NetUserFileConfig=HardDrive
AddToProgramFolders	Yes No	Add WorkPace to the Program Folders (will be added as WorkPace group).

## ***WorkPace.set***

The *WorkPace.set* file can only be used under network install Option 1 with user pointer files, and network install Option 2. This file is primarily designed to provide a correct name for a user's user setup file when the user's Windows logon name is not available. The *WorkPace.set* file can also be used to override any AutoSetup options specified in the *sysadmin.ini*. By use of this facility it is possible to perform an AutoSetup that provides different initial setups for different groups of users. To do this you can put several WorkPace user setup files into the central directory, and then give each user a *WorkPace.set* that specifies a different one of these user setup files to use as their initial setup.

For more information on using the *WorkPace.set* file see [Creating user setup files](#) and [Troubleshooting - AutoSetup](#).

Section: [AutoSetup]

## Section: [AutoSetup]

Note that that many of these are optional. You can create a *WorkPace.set* file that only has a few of these keys.

Key	Options	Description
UserSetupFileName	<i>Username</i>	This determines the name for the user's user setup file. This should be set to a unique name for each user - conventionally the user's logon name.
InitialSetup	Wizard Default File	How will the users' initial setup be determined?
InitialSetupFile	<i>Blank</i> <i>Filename.usr</i>	If InitialSetup=File then use this (central directory) setup file. No path allowed
FirstName	<i>Text</i>	Definition for user setup file
LastName	<i>Text</i>	Definition for user setup file
Department	<i>Text</i>	Definition for user setup file
Location	<i>Text</i>	Definition for user setup file

