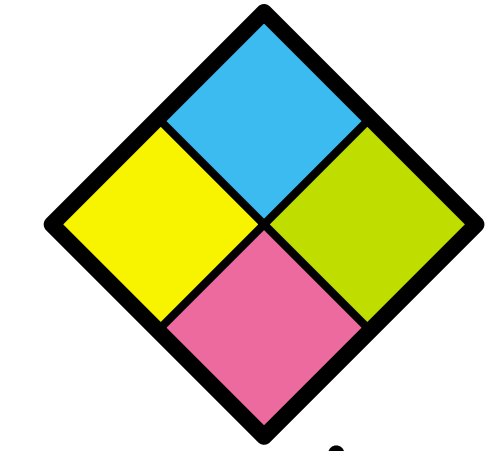


Mentor Question System

User's Manual

Version 1.1, May 1999

Specification

This software is designed to run on 16- and 32-bit Microsoft® Windows machines with a 386 DX/25 processor or higher (486 or higher recommended) and VGA or higher display (SVGA 256-colour display recommended).

Memory requirements:

Microsoft® Windows 95, Microsoft® Windows 3.x	8M of RAM
Microsoft® Windows 98, NT	16M of RAM

Disk space requirements:
A minimum of approximately 10M of free space is required to install the software. Tests may occupy from 50k to several megabytes depending on the amount of information stored. Answer files occupy as little as 32k.

Notes

As with all computer documentation, it is important that you read and understand the manual before using the software. Screen shots used in this manual were taken with the software running under Microsoft® Windows NT 4. The appearance may vary slightly on other systems, and especially under 16-bit operating systems such as Microsoft® Windows for Workgroups 3.11.

Note for users of *Mentor Question System* 1.0

A number of features have been added or modified since the release of version 1.0 of this software. If you have already been using *Mentor Question System*, then you are advised to read the chapter entitled *What's new in 1.1* first.

ISBN 1 84070 016 5

Enable is an imprint of Pearson Publishing Limited

Enable, Chesterton Mill, French's Road, Cambridge CB4 3NP
Tel 01223 350555 Fax 01223 356484
Email enable@pearson.co.uk Web site http://www.pearson.co.uk/enable/

Contents

Principles of operation

Mentor Question System is a set of flexible training and testing tools designed for teachers and trainers*, especially those working in a school setting. It allows tests to be taken by students on standalone machines, over a local network, or over the Internet. Tools are provided to allow teachers to modify the behaviour of tests, such as whether or not feedback is given, and for analysing answers to tests.

The system consists of two main applications:

- *Mentor Publisher* is the tool used by the teacher to publish tests and to analyse answers to tests
- *Mentor Receiver* is the tool used by students to take tests.

Structure of the *Mentor Question System*

The *Mentor Question System* recognises three types of information, corresponding to three types of file:

- *Question sets* are collections of questions, with feedback for each response to each question, information on how marks should be assigned to each question, and default settings for things such as time limit.

  Question sets for use with the software can be bought from Pearson Publishing Limited, and are distributed on *ePacks* CD-ROMs. Question sets are also provided with training and professional development packages (eg *InContexT*). A typical question set holds 100 or 200 questions on a given subject.

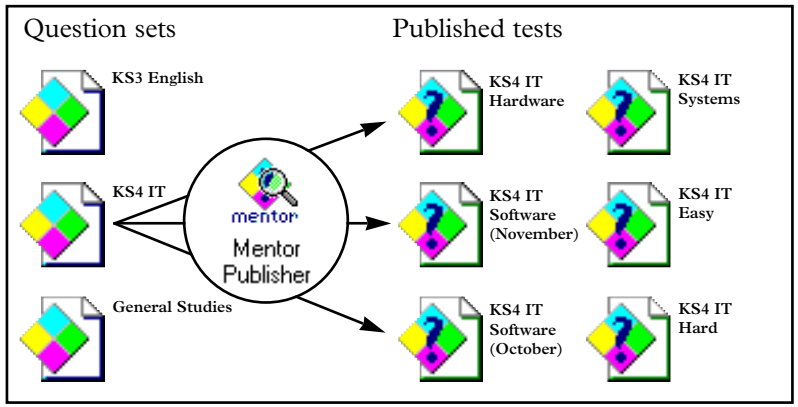
* For brevity's sake, the term 'teacher' is used throughout to refer to all types of teachers, trainers and administrators using the *Mentor Question System*. Similarly 'student' is used to refer to anybody using *Mentor Receiver* to take a test.

A question set can be thought of as a bank of information, from which any number of published tests may be derived. Files containing question sets have a .ego extension.

- *Published tests* are derived from question sets using *Mentor Publisher*. Once created, they are independent of the question set from which they were produced. They contain any number of questions, and settings such as whether or not feedback is to be given, the time limit for the test, etc. Files containing published tests have a .qis extension.
- *Answers* are produced when students take a published test. Files containing answers have a .ans extension. Each answer file corresponds to a published test, taking its filename from that test (but with a .ans extension), and contains all the responses from every student who has taken the test. If you wish to analyse the answers in the context of the questions they refer to, the published test to which the answer file corresponds must be retained.

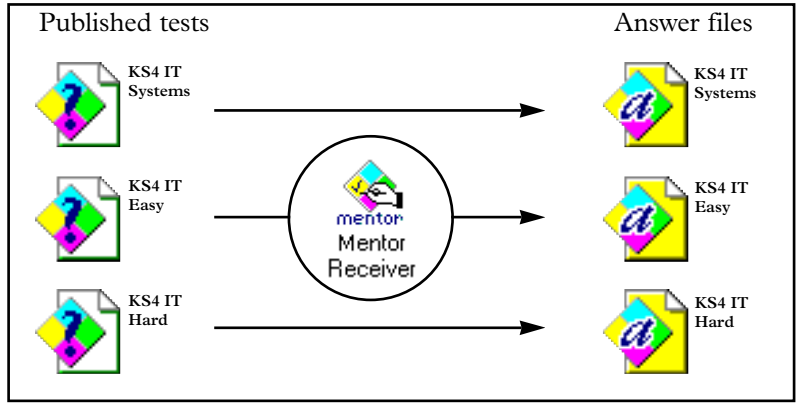
Uniqueness of files

It is important to bear in mind that every test that you publish is completely unique.



Even two 'identical' tests, published one after the other, containing the same questions and set up with exactly the same parameters, will be recognised as different by the *Mentor Question System*.

Each answer file corresponds to just one particular published test.*



As with all software, you are advised to keep backup copies of important files. You should consider archiving published test files if there is any chance that they will be needed in future.

Location and naming of files

When setting up the *Mentor Question System*, it is important to decide:

- where files will be stored
- what names files will be given.

You will probably want to store files containing question sets in a secure area of your network, to protect them from deletion or modification. Files containing published tests will need to be kept somewhere that is publicly accessible in order for students to be

* There is one important exception to this. Answer files generated in response to a series of different tests can be combined by using the advanced facilities in *Mentor Publisher*. See page 40 for more information.

able to take tests across the network. Answer files are automatically stored by the software in the same directory as the published tests to which they correspond (although this can be overriden – see *Command line parameters* on page 42). You might also want to archive published tests and their answers once they have been taken, so think about setting aside a location for these.

You may want to decide on a standard system for naming the files containing published tests. This should make it easy to infer the content of each test from its name, and may be useful if setting up a shortcut to a test (see *Command line parameters*, page 42). For more detailed information on installing and configuring the *Mentor Question System* on a network, see *Network installation* on page 55.

The test process

The process involved in setting up a test and allowing students to take it is as follows:

- Use *Mentor Publisher* to publish a test based on a question set (for example, one that you have obtained from your *ePacks* CD-ROM). Further details are provided on pages 8 to 13.
- Instruct the students to start *Mentor Receiver* on their machines, and use it to take the test. Further details are provided on pages 18 to 29.
- Use *Mentor Publisher* to view and analyse the answers to the test. Further details are provided on pages 13 to 17.

Installation

Installing from CD-ROM or hard disk

The installer program, MENTOR.EXE*, is suitable for computers running Microsoft® Windows 3.x, 95, 98 or NT. If you are installing from an *ePacks* CD-ROM then the installer may be found inside the MENTOR directory, inside the DATA directory on the disc.

Installing over a network

To install the program over a network, either:

- copy the installer onto a shared drive
- insert a CD-ROM containing the installer (eg an *ePacks* disc) into a CD-ROM drive that is shared on the network.

On the computer where you wish to install the software, locate the installer and run it. For more information on accessing and installing files across a network, consult your computer's manual.

If you are installing the *Mentor Question System* onto a number of machines on the network, then please see *Network installation* on page 55 for more information.

Installing from floppy disks

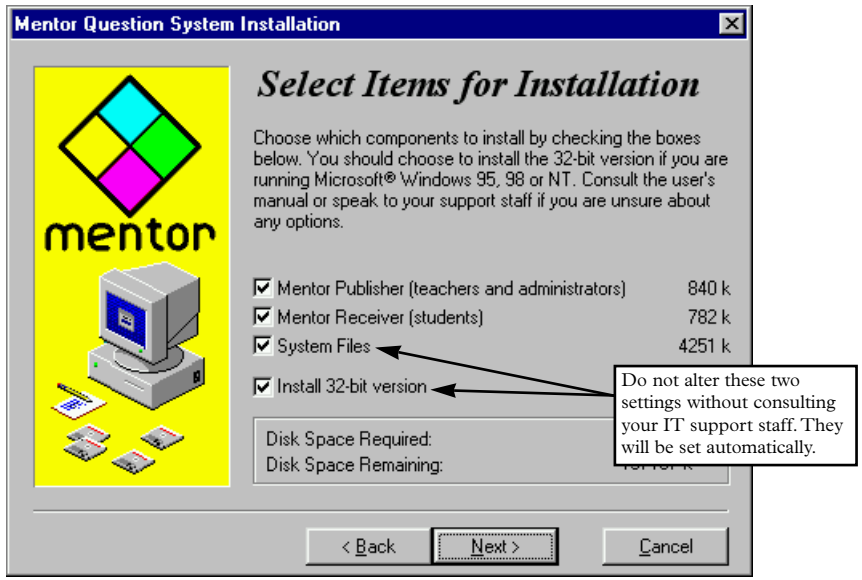
On *ePacks* CD-ROMs, the DISKS directory, found in the folder containing the installer, holds the installer split into several files, for copying to floppy disks. Copy MENTOR.EXE to the first floppy disk, then MENTOR.W02 to the second floppy disk, then

* If you have obtained your installer from the Enable Web site, or from another CD-ROM (eg *InContexT: Skills*), then the filename may be different (eg MNTSETUP.EXE).

MENTOR.W03 to the third disk, and so on. For more information on copying files, consult your computer's manual. To perform the installation, insert the first floppy disk into the computer's disk drive, and run MENTOR.EXE. You will be prompted to insert the other disks as the installation proceeds.

The installation

The installer will ask you to select which components of the *Mentor Question System* you wish to install. The most important decision is whether to install *Mentor Publisher*, *Mentor Receiver*, or both on a particular machine.



Once you have selected the components to install, you will be prompted to select a directory into which to install the software. The installer will choose a default directory for you (C:\MENTOR on Windows 3.x or C:\Program Files\Mentor on Windows 95/98/NT); you can either use this directory or choose your own.

You will then be asked whether you want to keep backup copies of any files that are replaced; you are *strongly* advised to answer yes to this question. You are also asked where you wish to store the backup copies.

Next you will be asked in which program group to place your program; you can select an existing one or create a new one. The default program group is called *enable*. If you have previously installed an Enable software product then this group will probably already exist.

The installer will then install the files needed to run *Mentor Publisher* and/or *Mentor Receiver* to your computer's hard disk.

Consult *Help* (page 60), or contact your IT support staff in the first instance, if you experience any problems with installing or using the *Mentor Question System*. The Enable Web site (http://www.pearson.co.uk/enable/) also holds solutions to common difficulties.

Obtaining question sets from your *ePacks* CD-ROM

Follow the instructions that came with your *ePacks* CD-ROM to unlock the question sets you have purchased and, when prompted, save them into the directory you have set aside for question sets (see *Location and naming of files*, page 3). You should only need to perform this operation once. There may also be a package of filter files that accompanies the question set; you can unpack this into individual filter files using *Mentor Publisher* – see page 35.

You can obtain demonstration question sets, which will allow you to try the *Mentor Question System*, from the Enable Web site (http://www.pearson.co.uk/enable/).

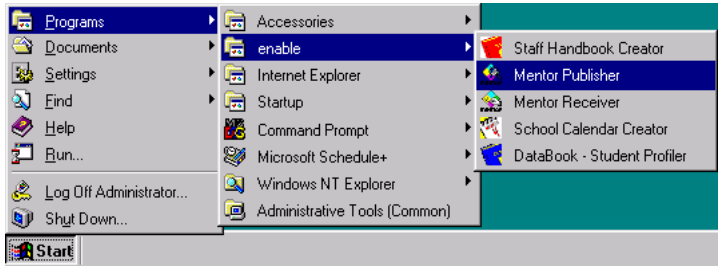
Mentor Publisher

Mentor Publisher is the teacher's part of the *Mentor Question System*. It serves two purposes: producing tests based upon question sets, and analysing the answers to tests.

Starting *Mentor Publisher*

In Microsoft® Windows 3.x or Windows NT 3.5.1, go to Program Manager and open the *enable** group, then double-click on the *Mentor Publisher* icon.

In Microsoft® Windows 95 or Windows NT 4.0 or above, click on the **Start** menu, then **Programs**, then the *enable** group, then *Mentor Publisher*.



Alternatively, if it has been correctly installed, then *Mentor Publisher* will be automatically launched when you double-click on a question set file (a file with a .ego extension).

* This is the default group; however, a different group may have been specified during installation. Consult your network administrator if you are unsure.

Registering

When *Mentor Publisher* is first started up it will try to find existing registration information (eg for an *ePacks* CD-ROM or for another Enable software product). If it cannot locate an existing registration then you will be given the chance to register.

In order to register, you will need an *ePack* Number, as provided with the *ePacks* CD-ROMs that question sets are usually supplied on. You can obtain an *ePack* Number from Pearson Publishing if you have obtained *Mentor Question System* fromanother CD-ROM or downloaded it from tour Web site. If you have lost or forgotten your number you should call Pearson Publishing for a replacement.

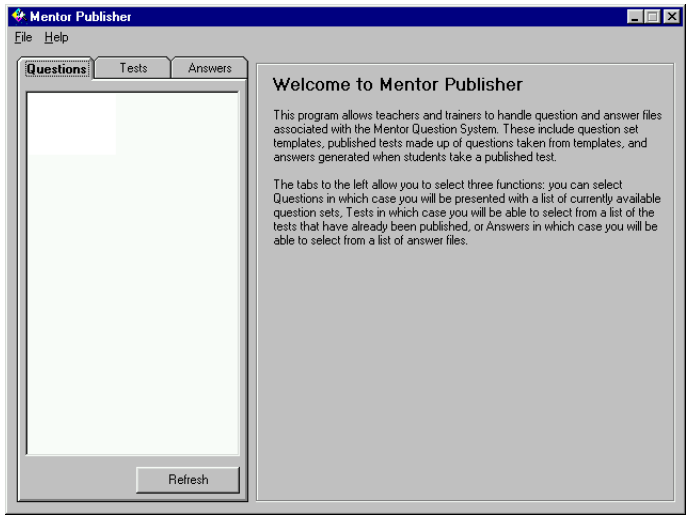
Even if you do not register, you can still evaluate the *Mentor Question System*. Example question sets can be downloaded free from the Enable Web site (http://www.pearson.co.uk/enable/).

Copies of *Mentor Publisher* which have not been registered will have limited functionality. Published tests and answer files created with an unregistered copy may not be usable with the software once you have registered it properly; for this reason you should only use an unregistered copy to *evaluate* the *Mentor Question System*. Unregistered copies of the software will have some or all the following limitations:

- printing and exporting of reports is disabled
- graphs of student performance cannot be compared
- a maximum of three 'locations' can be specified
- tests can only be published for up to 20 users
- advanced answer file manipulation is disabled
- answer files cannot be analysed in the context of the published test to which they refer.

Entering file locations

After the credits screen, the screen shown below will appear:

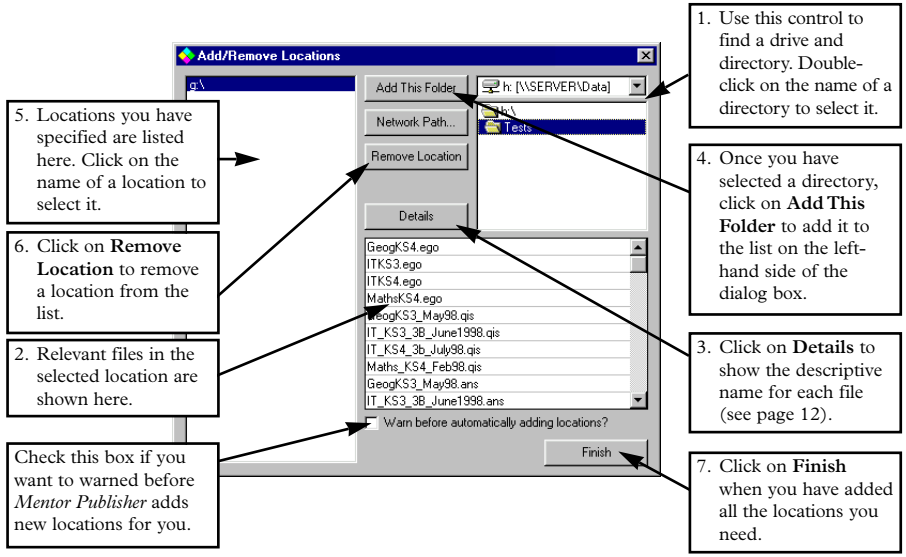


The first thing you need to do before you can use the other features of *Mentor Publisher* is to set up 'locations'. Each location is a directory on your computer's hard disk or on your local network containing question sets, published tests, or answer files.

Specifying locations tells *Mentor Publisher* where to look for files to work with. The first time you use *Mentor Publisher*, you may need to specify the location of the question set(s) you wish to use.

Locations are added automatically when you launch *Mentor Publisher* by double-clicking on a file. When you publish a test to a new location, that location is also added automatically. You can choose whether or not to be warned when new locations are being added for you (see page 11). You can also add and remove locations by hand at any time.

Select **Add/Remove locations** from the **File** menu to begin adding locations. A dialog box appears, as shown below:



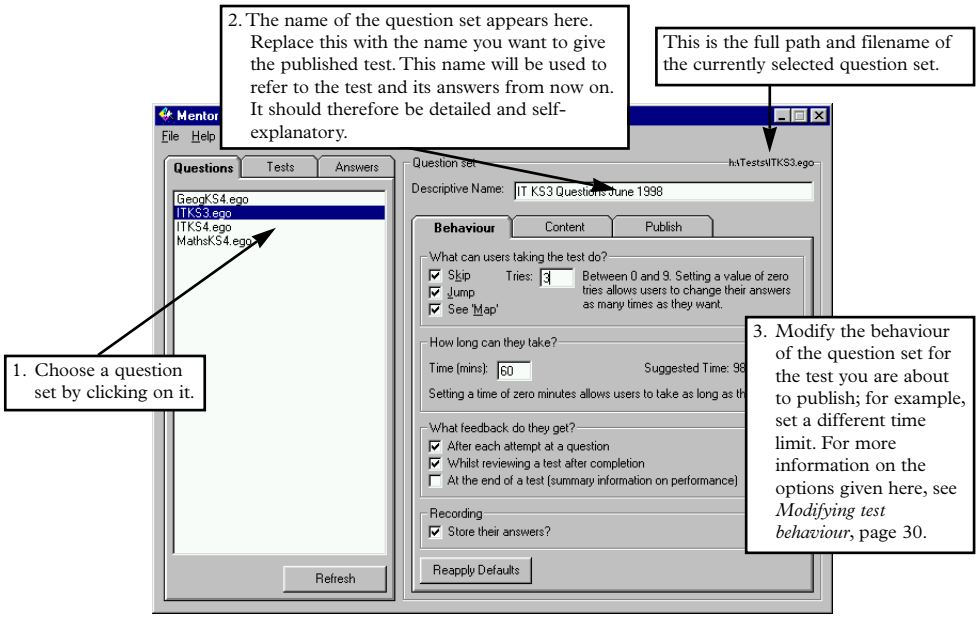
Click on **Network Path...** to specify a location by its network path, for example, \\SERVER\TESTS. If you are unsure of how to use this feature, consult your network administrator.

The list of locations is stored in the computer's settings, and is checked each time *Mentor Publisher* is started. You can add or remove locations at any time.

Publishing tests

Mentor Publisher allows you to take question sets and use them to publish tests ready for use by students. Selecting the **Questions** tab in *Mentor Publisher* will provide you with a list of question sets (.ego files) found in your currently selected locations.

Select a question set from the list in order to find out more about it and be able to publish it.



Selecting the **Behaviour**, **Content** and **Publish** tabs allows you to configure the test you are about to publish:

- The **Behaviour** tab allows you to change the way the test as a whole behaves (time limit, feedback, whether students can skip questions or not, etc). Once a test is published you cannot modify its behaviour.
- The **Content** tab allows you to select which questions you wish to include in the test. You could, for example, publish a test containing just the questions on Europe from a Geography question set. Once a test is published you cannot modify the content.

- The **Publish** tab allows you to publish the test. This can either be for named users (in which case a list of names may be typed in or imported), or you can choose not to specify users, in which case each person taking the test will have to enter their name themselves. Once a test is published, you cannot alter this decision.

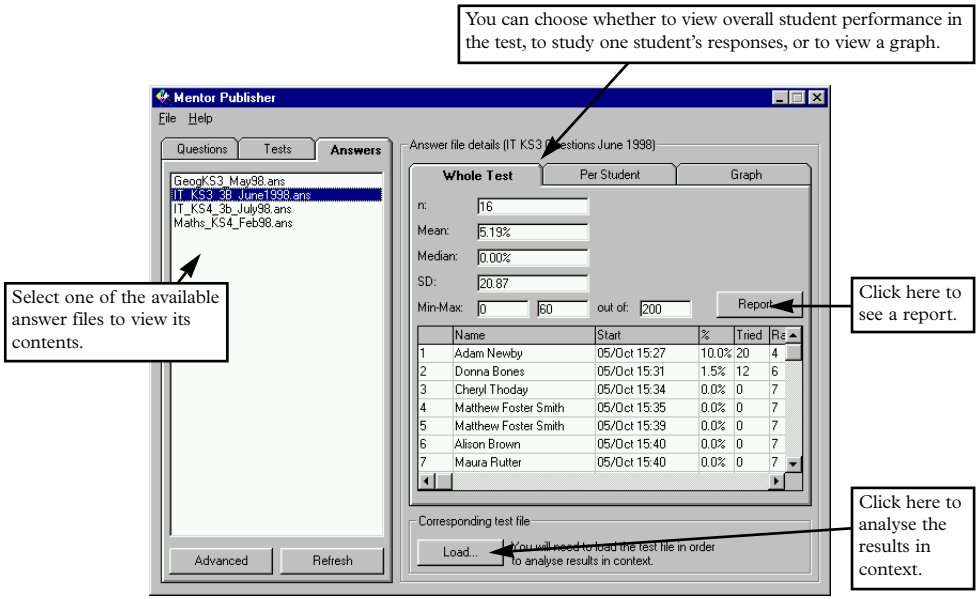
See *Modifying test behaviour* (page 30) for more information on configuring tests, and how the various options will affect students taking the tests.

When you have finished modifying the settings for your test, select the **Publish** tab, then click on the **Publish…** button found on it to publish your test. A dialog box will appear allowing you to select where to save your test, and what filename to give it (see *Location and naming of files*, page 3). You are advised to save the test in a location you have already specified to *Mentor Publisher* (see *Entering file locations*, page 10), or to allow *Mentor Publisher* to automatically add the location; otherwise, remember that you will have to add the location in which you have saved it to the list of locations in order to access it and its answer files. The test is now ready to be taken by students using *Mentor Receiver* (see page 18).

Analysing answers

Once students have taken a test, you can use *Mentor Publisher* to analyse and report on their answers. Selecting the **Answers** tab in *Mentor Publisher* will provide you with a list of answer files (.ans files) found in the locations you have specified.

Clicking on the name of an answer file in the list will load it ready for analysis. You will be warned that loading the answer file will temporarily prevent other users from accessing it; they will only be locked out of the file for the time it takes to load it.



You can analyse answers for the test as a whole, and per student. Either of these may be done in the context of the test questions if required. The whole-test analysis includes simple statistics and report generation. There is also a graphing feature for whole-test analysis.

Results as a whole

The analysis for the test as a whole, accessed by clicking on the **Whole Test** tab, consists of:

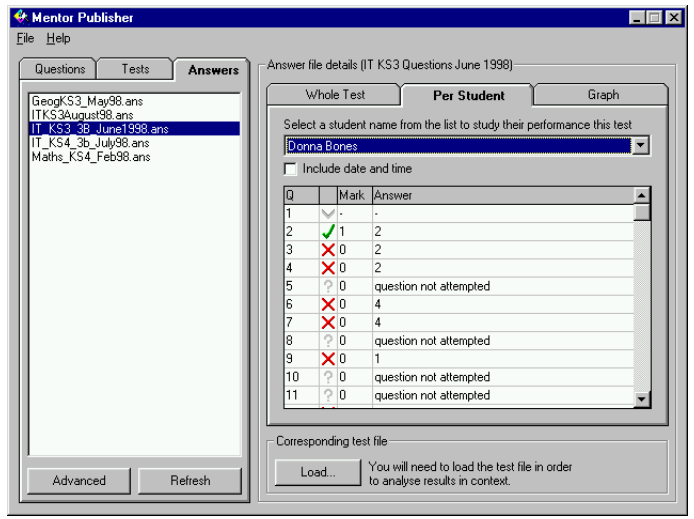
- Statistics (number of people, mean and median percentage scores, standard deviation, minimum and maximum actual scores, and total possible score).
- Results grid (which shows a summary of the performance and answers of each student). The results grid can be sorted by name, number, rank, start time and date, etc (either ascending or descending) by clicking in the column headers.

Each row of the grid shows the responses to each question made by a particular student. Scrolling left to right along the results grid allows you to pick out at a glance those questions that have been easy, hard, or frequently not attempted – correct answers are marked with a green tick, incorrect answers with a red cross, and questions not attempted by a grey question mark. Where 'non-question' screens (eg explanatory diagrams) formed part of a test, those screens are indicated by a chevron (>).

When a test is being analysed in context (see page 16), you can right-click on any question to either view it or print it out.

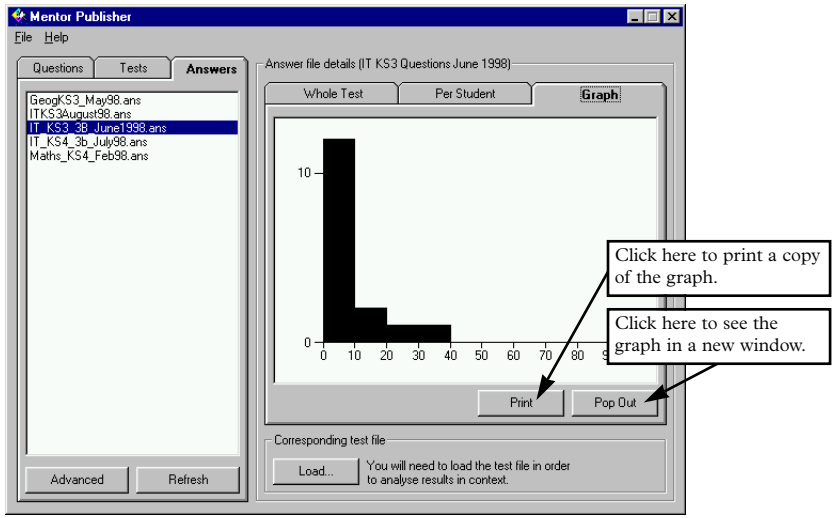
Results per student

Selecting to view results per student displays the results for just one person, arranged down the page in a grid. Responses are marked with a tick, cross, etc as with the whole-test analysis. A further column shows the actual answer(s) selected by the student for each question.



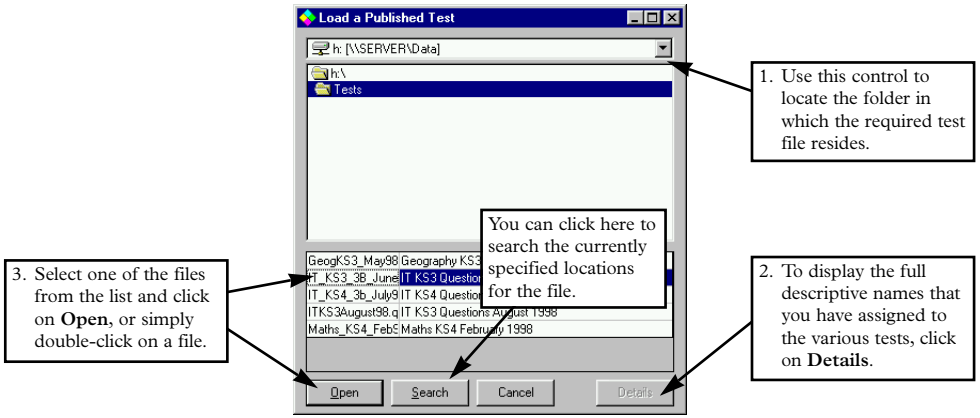
Graph

Clicking on the **Graph** tab displays a graph showing the number of students taking the test with scores falling into certain ranges.



Analysing answers in context

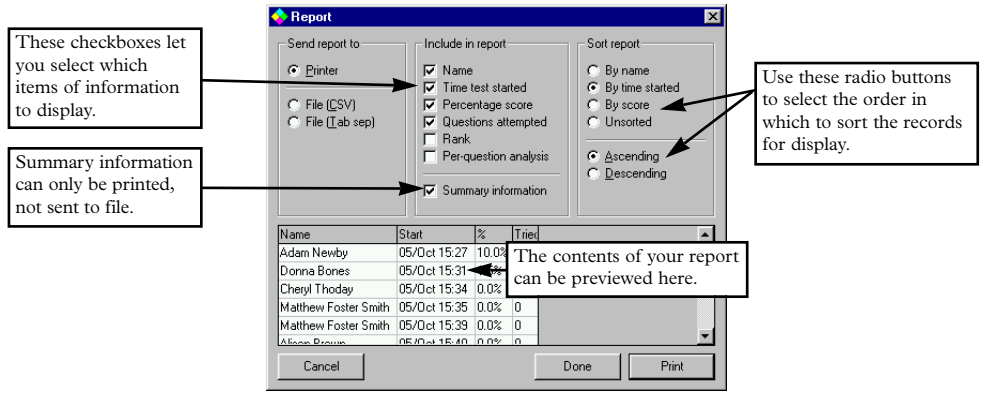
In order to view an answer file in context, it is necessary to locate and load the published test to which it corresponds. Click on the **Load…** button. You will then be presented with the following dialog box:



You will be warned if you choose the wrong test file. Once you have loaded the test, you will be able to view and print questions by right-clicking wherever a question is mentioned in the analysis screens.

Generating reports

Click on **Report…** on the **Whole Test** tab to generate a report from the analysed test results. A report is similar to the whole-test analysis, but provides additional filtering and sorting options, and may be sent to a printer (in which case statistical summary information, as shown onscreen for the whole-test analysis, can be included), or to comma-separated (CSV) or tab-separated file formats, ready for import into an application like Microsoft® Excel.



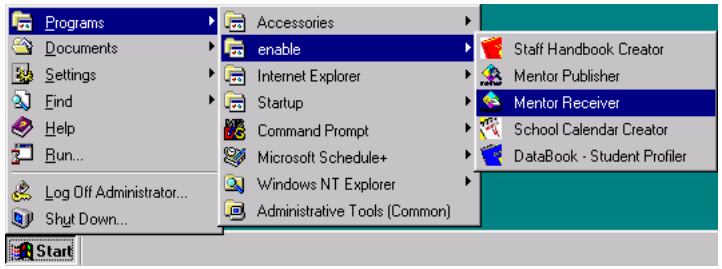
For more on importing reports into other software packages, please refer to their documentation.

Mentor Receiver

Starting *Mentor Receiver*

In Microsoft® Windows 3.x or Windows NT 3.5.1, go to Program Manager and open the *enable** group, then double-click on the *Mentor Receiver* icon.

In Microsoft® Windows 95 or Windows NT 4.0 or above, click the **Start** menu, then **Programs**, then the *enable** group, then *Mentor Receiver*.



Mentor Receiver will also be launched when you double-click on a test file (a file with the .qis extension), in which case the test will be loaded ready for use.

* This is the default group; however, a different group may have been specified during installation. Consult your network administrator if you are unsure.

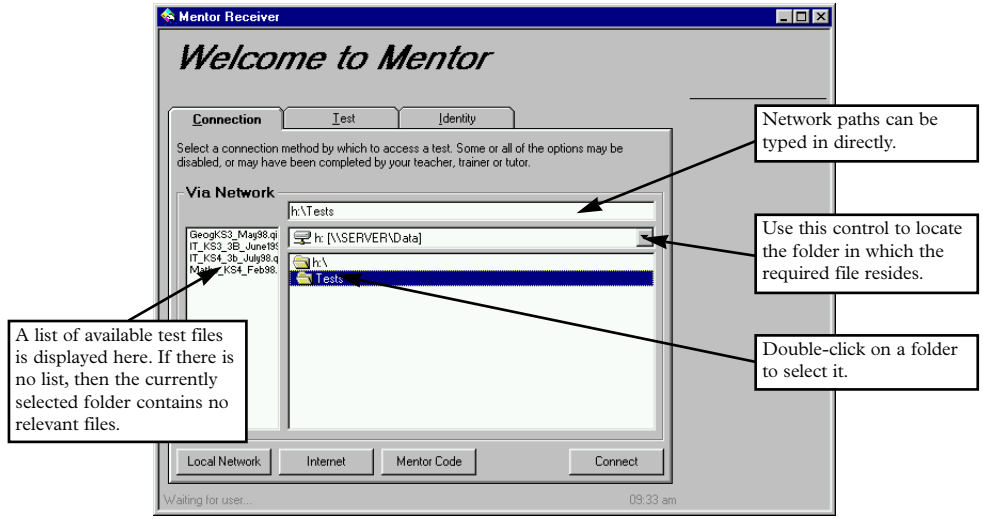
Your IT administrator may have set up a shortcut to the program for you. This shortcut may force *Mentor Receiver* to select a particular test, or to specify a particular name for the person taking the test.*

Starting a test

The first time *Mentor Receiver* is started, you will need to specify the location of the published test you wish to take. Then you will need to select the test and specify your name, in order to identify your responses in the answer file.

Connecting to a source of tests

Tests may be taken from any of a number of sources: a local hard drive or floppy disk drive, a network drive or other network path. They can also be accessed using Internet protocols – see *Internet operation* (page 50) for more details.

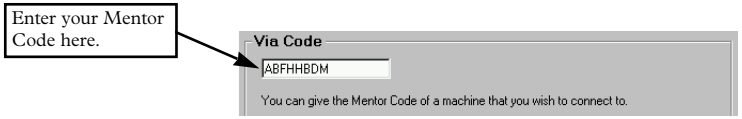


* Teacher's note: see page 42 for information on setting up such shortcuts.

To find files on local drives, use the control as shown above. To connect to a test over the Internet, click on the **Internet** button and specify the location of your test server (see *Internet operation*, page 50). The display changes to that shown below:

If you are unsure of how to use any of the settings, consult your IT administrator.

You can also specify a location using a Mentor Code. A Mentor Code is a sequence of letters that encapsulates a set of connection options, and should be supplied by your IT administrator.* Click on the **Mentor Code** button to specify a location in this way. The display changes to that shown below:



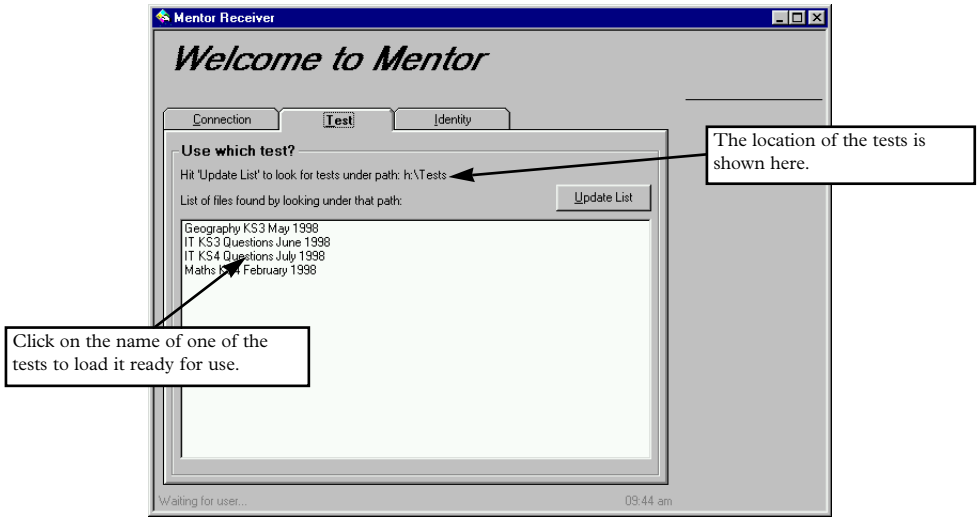
Once a valid location is found, click on **Connect**.

The next time *Mentor Receiver* is loaded, the same connection options will be assumed, and the list of available tests (see overleaf) will be displayed immediately.

*Teacher's note: For more information on how to obtain a Mentor Code, see page 52.

Selecting a test

Once you have connected to a source of tests by clicking on the **Connect** button, you will be presented with a list of tests in that location, as shown below:



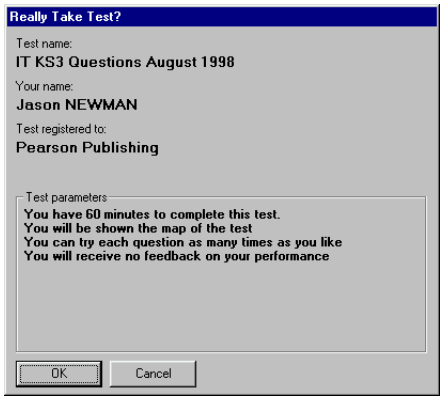
You can click on **Update List** to search your selected location for tests again at any time.

Establishing your identity

Once a test is loaded, you will be taken immediately to the **Identity** tab. Here you must either enter your name, or select a name from the list that is displayed. Alternatively, your name may have been preset by your teacher, in which case it will appear automatically and you will not be able to alter it.

Before you start a test it is worth checking that you are connected to a printer since you may be able to print a performance summary at the end of the test (see page 39).

Click on **Begin** or press the Return key (after typing in your name) to take the test. A dialog box appears, as shown below:



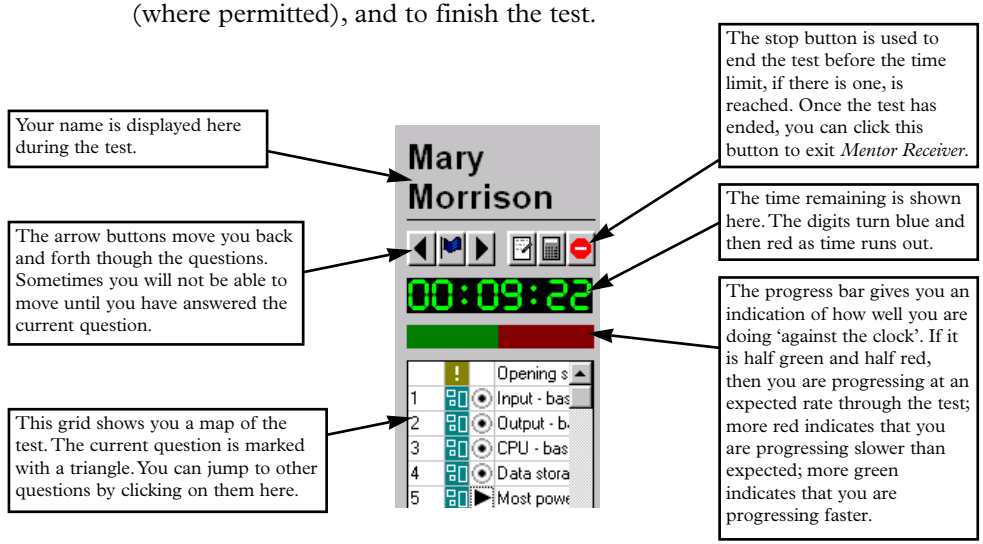
Check your name and the name of the test before it starts. Any constraints imposed when the test was published will also be shown, eg the time limit, the number of tries permitted, whether questions can be skipped, etc. Click on **OK** to begin the test; click on **Cancel** to select a different test.

Working through a test

You will now be presented with the first screen of the test. You can work through the test using the controls shown below, although some controls or features may have been disabled by your teacher.*

Basic controls

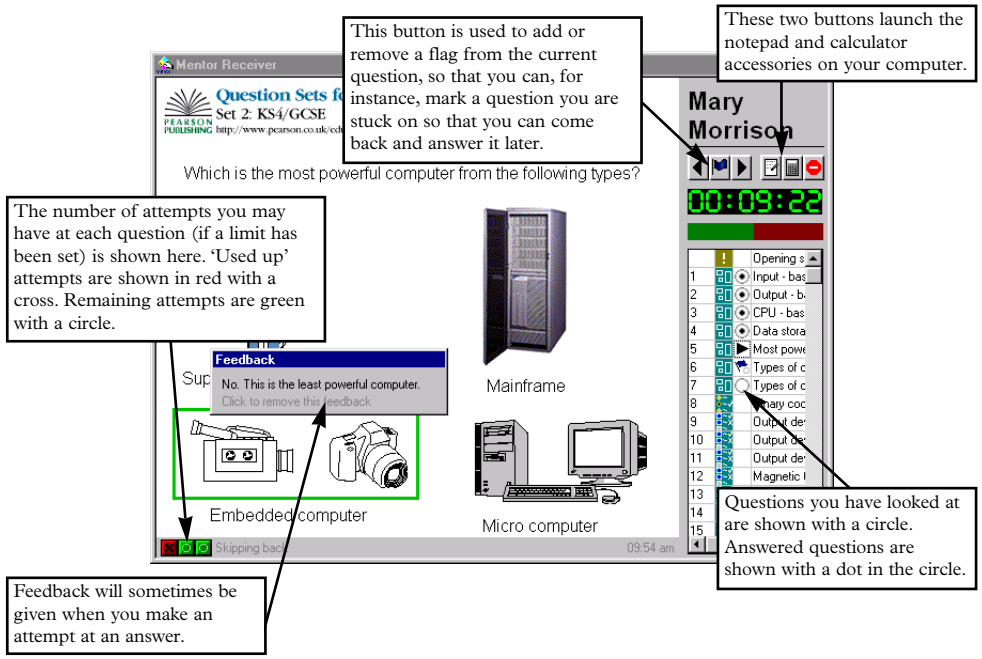
The basic controls on the right-hand side of the screen (outlined below) are all you need to take a test. They allow you to move back and forth through the questions, to jump to a particular question (where permitted), and to finish the test.



*Teacher's note: see page 31 for details on how to disable features.

Advanced controls

In addition to the simple controls described on page 23, there are more sophisticated controls and display elements, shown below. Remember that some features may be disabled.



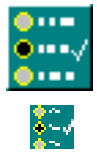
The time remaining will only be displayed if a time limit has been imposed on the test. If it is not shown, then you can take as long as you want. The progress bar, similarly, will only be shown if a time limit has been set.

The map of the test, which shows all the questions and allows you to jump directly to other parts of the test, may also have been disabled. The flag button will not be displayed if the map of the test has been disabled.

Question types

These are a number of question types available in tests produced for use with *Mentor Receiver*. Each is indicated within the software by an icon, as shown below:

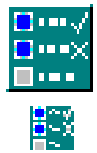
User alert 'questions' give explanatory or illustrative information, for example, the title page of a published test is a user alert. Sometimes user alert screens will only be displayed for a fixed period, after which time the next screen will appear automatically.



Multiple choice questions allow you to choose from several alternative responses. You can only select one response.

Normally, but not always, there will only be one 'correct' response. If there is more than one correct response then some may be worth more points than others.

There may be feedback for some of the responses (if this feature has not been disabled).



Multiple response questions are similar to multiple choice except that you may choose any number of the possible responses. At least one of the responses will be correct. One or more are likely to be wrong.

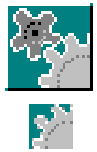
In general, you will have to select all of the correct responses and none of the incorrect ones in order to be awarded points for the question. Sometimes you will be awarded points for each correct response, and lose them for incorrect ones.

Multiple response questions do not give any feedback while a test is in progress. However, when you are reviewing a

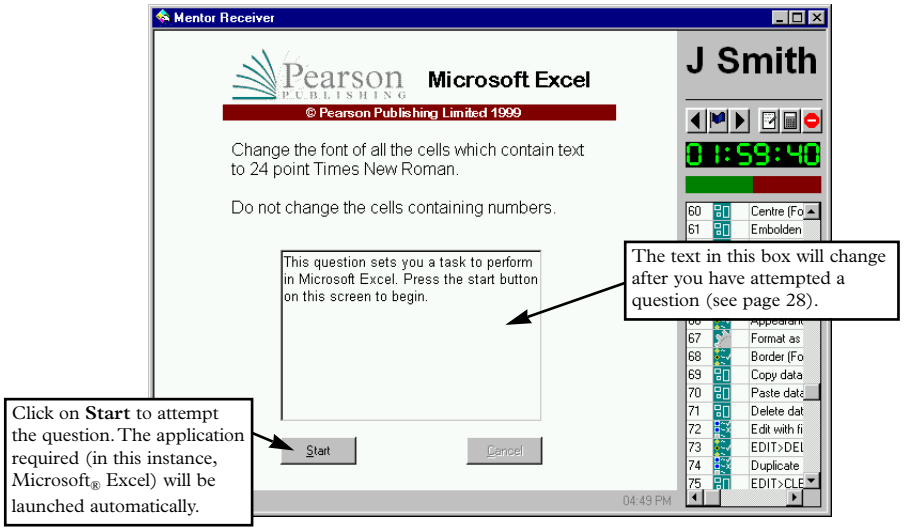
completed test, you are shown, via a lit lightbulb icon, which responses were correctly selected (or left unselected).

Hot spot questions are the same as multiple choice, except that the possible responses are regions of the screen that you must click on.

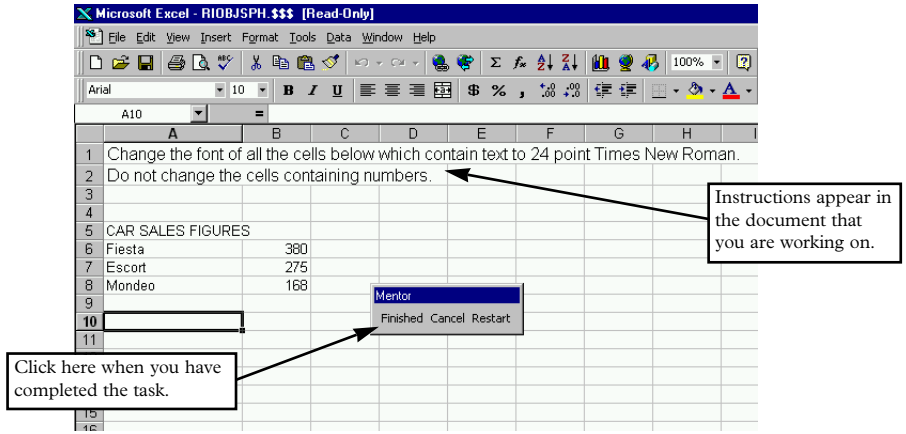
As with multiple choice, there may be feedback, and there will normally, but not always, be just one correct region to click on.



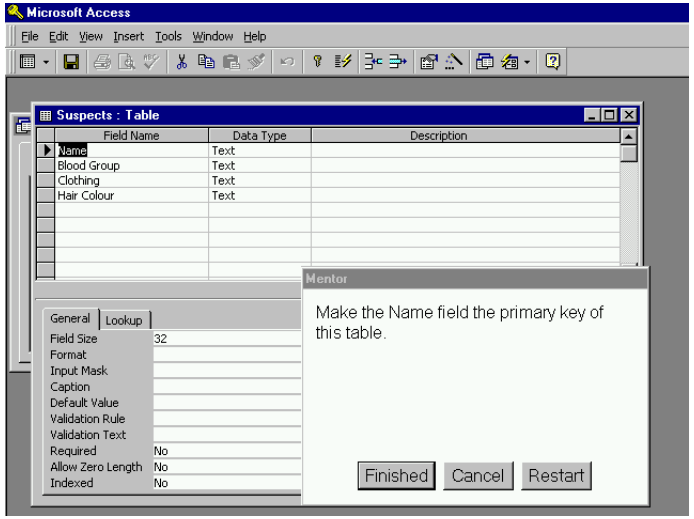
Automation questions test your practical skills by setting you a real task to carry out in an external application such as Microsoft® Word.



The software on which the question is based also has the instructions displayed so that you are clear on what you need to do. A free-floating *Mentor* command bar appears with three buttons on it: **Finished**, **Cancel** and **Restart**.

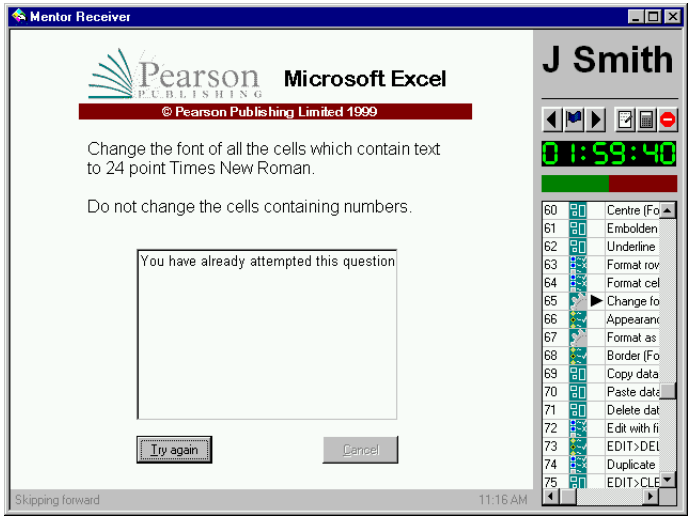


In questions on Microsoft® Access, the command bar is used to display your instructions:



Once you click on **Finished**, *Mentor Question System* records that you have attempted the question, even if you haven't done anything. If you don't want to attempt the question at present, click on **Cancel** to return to the rest of the questions. If you make a mistake whilst attempting the

question and want to start again, click on **Restart**. You will then be able to start the question afresh. If you are allowed to attempt the question more than once, you can click on **Try again** (which appears after you have attempted a question).



There may be more than one way of performing the task in an automation question. Provided that the question does not specify that you use a particular method (eg using the keyboard only), your answer will be marked correct if it produces the desired result. It is also important that you only do what the question asks you to; if you make extra alterations your answer may not be correct.

Feedback, when available, will inform you whether you have performed the task correctly and, in some cases, it may say why your answer was wrong.

Finishing a test

The test can finish in one of three ways:

- you can choose to end the test yourself by clicking on the stop button
- the time limit can run out (if there is one)
- the test can be shut down when being run in Internet mode (see *Internet operation* on page 50).

After the test has finished you may, at the teacher's option, be presented with a summary of your performance. If you have a suitably configured printer connected to your computer you may be able to print out your summary and a breakdown of which questions you got right and which wrong.

You will also see a button enabling you to submit your information to an Internet server for further analysis. This feature relies on Internet access, and is only relevant to certain, specialised tests; it is very unlikely that you will need to use this feature.

Reviewing a test

After finishing a test, you may review the test. This allows you to move freely about the questions; you may be presented with feedback on your answers. Apart from the feedback, you will normally receive no indication of whether you were right or wrong.

While reviewing a test, you will be able to switch back to the performance summary (see above) if one has been provided.

Exit *Mentor Receiver* by closing the application window, or by clicking on the exit button. 

Taking it further

Under the **Questions** tab of *Mentor Publisher*, you can configure a test you are about to publish in three ways. You can:

- modify its behaviour; select the **Behaviour** tab
- modify its content; select the **Content** tab
- configure who will take the test; select the **Publish** tab.

Modifying test behaviour

Mentor Publisher allows you to modify the default behaviour of the tests you are publishing in a number of ways:

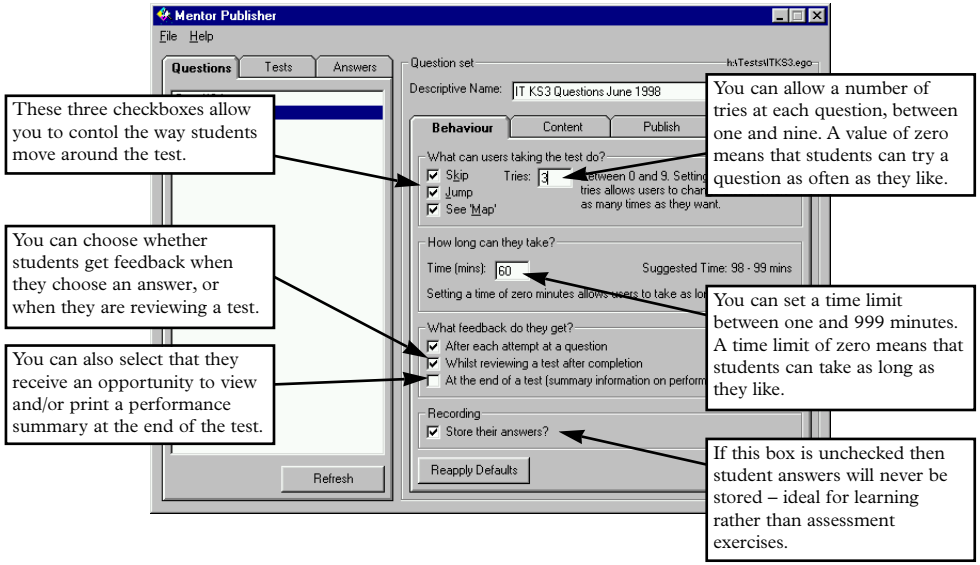
- you can restrict the way in which students can move around the test, for example, you can force them to answer each question in turn
- you can modify, or remove, the time limit
- you can set a limit on the number of attempts a student can make at a question, or you can allow students to try questions as often as they like
- you can change the way in which feedback is displayed.

By combining these various settings, you can create tests that can be used as teaching, revision, or assessment tools. You can tailor the software to your needs more closely if you understand how each of the possible changes affects the way tests are presented to the students.

You can also, as described on page 12, set the name of the test before you publish it. You should always give the tests sensible, clear, unique names; consider including the date, the target audience, or your name or initials, as well as the subject matter.

Moving around the test

You can control how students move around the test by either allowing or disallowing them to 'skip', 'jump', and see the 'map'.



If you allow students to skip questions, then they may leave them unanswered. Otherwise, as soon as they look at a question, they will not be able to move on until they have answered it. After students have answered a question, they will be able to go back to it but will not be able to change their answer.

If students are allowed to jump, then they may answer questions in any order. If this box is not checked, then students can only move from each question to the next one, and going back to a question is prohibited, as is omitting questions. The flag button (see page 24) is disabled when jumping is not permitted since questions cannot be visited again.

Checking *See 'Map'* allows students to see a list of the questions comprising the test. The map also allows students to go directly to

any question, except as prohibited by the skip and jump settings. When *See 'Map'* is not checked, the flag button in *Mentor Receiver* is disabled.

Time

The time limit for the test can be specified to the nearest minute. A value of zero minutes can be used to specify that there should be no time limit. The maximum permitted time limit is 999 minutes.

A suggested time will normally be shown. If questions are omitted (by modifying test content, see page 33), then the suggested time will become shorter. The suggested time is only a guideline; less able students may need longer. You can always stop a test earlier than the limit you set, but there is no way of extending the time limit for a test once it has been published. If in doubt, set no time limit and time the test yourself as you would a paper-based exercise.

The progress bar (see page 23) will only be shown for timed tests.

Tries

You can specify that students have a limited number of attempts at any question: this may be between one and nine attempts. A value of zero attempts can be used to specify that students can try any question as often as they like. One attempt is deemed to have taken place when:

- an option is clicked on in a multiple choice question
- a hot spot is selected in a hot spot question
- a student has selected/deselected responses, in a multiple response question, as many times are there are total responses for that question.

If only one try is allowed, then students have to select the correct answer first time. You should also bear in mind that if feedback (see below) is set to 'after each attempt' mode, then students will always be able to answer a question correctly unless the number of tries is severely restricted.

The number of tries remaining for a question is indicated at the bottom of the screen by a row of green boxes with circles; the boxes turn red (and the circles turn to crosses) as each try is used up.

Feedback

You can choose that students receive feedback on individual responses and/or on the test as a whole. Per-response feedback can be shown immediately after each attempt at a question, and/or once the test has finished while the student is reviewing their answers.

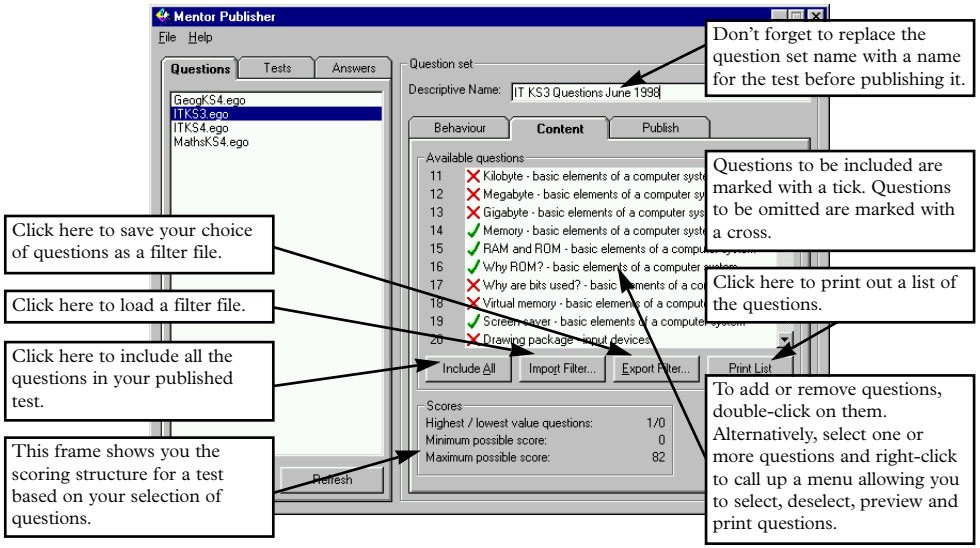
Feedback for correct responses is normally, but not always, limited to a simple confirmation that the question has been answered correctly. Feedback for incorrect responses will sometimes highlight the error, or will sometimes hint at or reveal the correct answer; if more than one try is permitted, then per-response feedback may make some questions in a test trivial.

Multiple response questions have no feedback (but see page 25).

Modifying test content

Question sets hold hundreds of questions on a number of topics within a given subject, pitched at a variety of levels. You will almost certainly want to publish tests with fewer questions: a test with 200 questions might take several hours for a student to complete!

You can modify the content of a test in two ways: you can add and remove questions by hand, or you can import a filter (a text file containing a list of questions to include in a test).

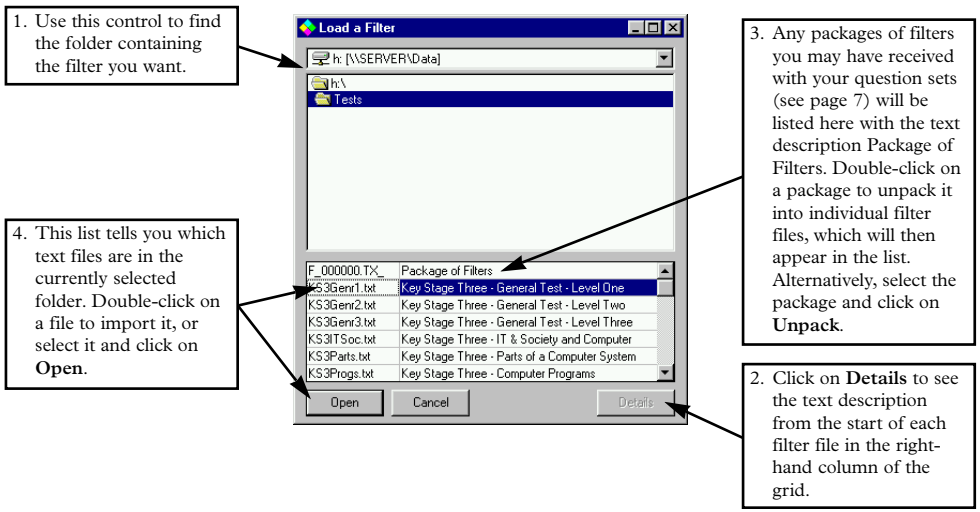


A filter is simply a list of numbers, each number corresponding to one of the questions (or other screens) in the question set. When you apply a filter to a question set, the list of questions will change to select or deselect a number of questions. Some standard filters may be supplied with a question set, for example, a filter which selects only the reproduction questions from a Science AT2 question set.

You can also make your own filters using any text editor. A text description of the filter can be included at the start of the file to help identify it. Each subsequent line should then contain a number indicate a question.

To help you to plan what questions to include in tests, and make your own filters, you can print out a list of all the questions in the currently loaded question set. You can also preview or print questions by right-clicking on them in the content list; note that when previewing questions in *Mentor Publisher* you will see more information about the question (eg the score for an automation question) than students will be shown when attempting the question in *Mentor Receiver*.

Clicking on **Import Filter...** allows you to apply a filter to the question set. The Load a Filter dialog box, shown below, appears:



Caution: Any text files will be shown in the dialog box, not just filters.

Clicking on **Export Filter...** allows you to save information about the current selection of questions as a filter file. You will be asked to supply descriptive text, to be used as a title for the filter.

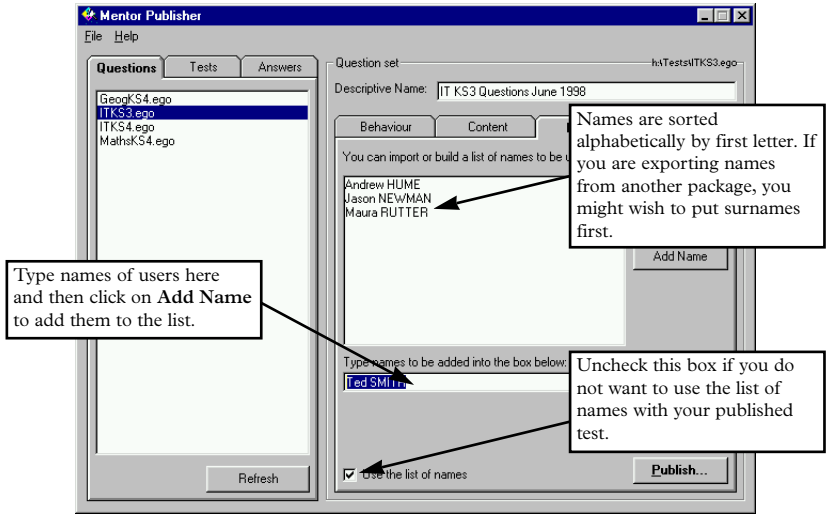
It is quite possible for you to import one of the standard filters supplied with a question set, modify it by selecting and deselecting

questions, and export it again to make your own version of one of the standard tests.

Publishing for named users

Tests can be published either to be taken by any user, or only by a set of prescribed, named users.

When a test is published for named users, then students connecting to the test are presented with a list to select their name from. Only the names you have entered will ever be available to students taking the test, but there is no restriction on the number of times that a given student may retake the test (subject to a maximum of 32 767 total attempts by all students).



Names may be imported from any plain text file, where they should be separated by carriage returns or tabs, and may be up to 50 characters long. You may be prevented from importing too many names at once. Duplicate names are ignored.

If you do not specify a list of names for the test, then students may enter any name they wish.

The student's name is displayed as large as is possible in the top right-hand corner of the screen when they are taking the test; this should allow teachers moderating the test to check that students have used sensible (and real) names.

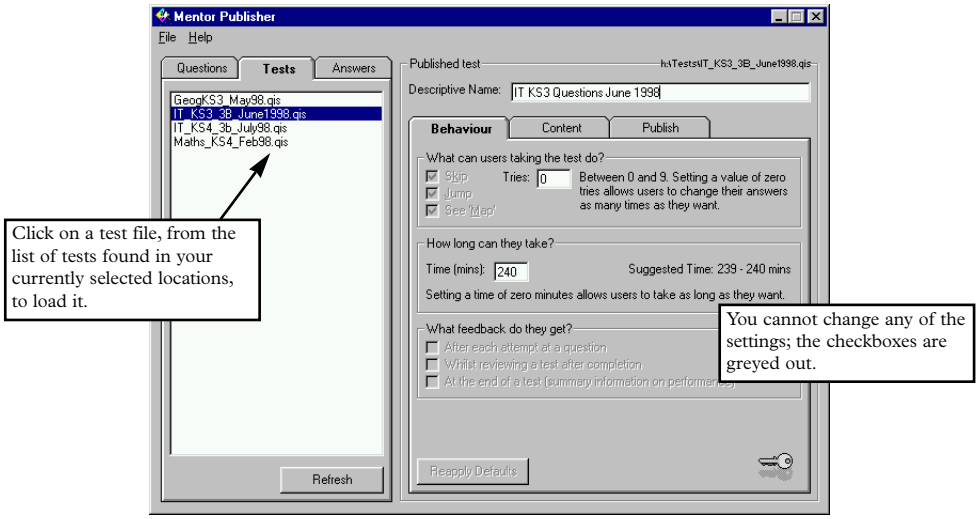
It is also possible to look at the answer file for a test while it is in progress (see page 13). Students will be prevented from submitting answers whilst the file is loading, but this should only take a few seconds. Looking at the names entered in the answer file can help detect any silly or incorrect names, particularly when tests are being run, fully or in part, from remote sites.

Examining published tests

In addition to examining the contents of question sets with a view to publishing tests from them, it is possible to use *Mentor Publisher* to look at tests which have already been published, in order to see exactly how they have been configured, and what questions they contain.

In order to access this feature, simply click on the **Tests** tab. The list will then show test files that are found in your currently selected locations.

Clicking on a filename will load the test, allowing you to see how its behaviour was configured, and what questions it contains. You cannot modify the behaviour or content of a published test. You can, however, add additional names to the test if it was published for named users.



Adding names

Once you have loaded a published test, if it was published for named users, you may click on the **Publish** tab to add names to the list. Type in names and add them to the list as described on page 36, then click on **Save** to add them to the published test.

In order to return to viewing question sets, click the **Questions** tab.

Answer files

Mentor Publisher includes tools for analysing answer files and, for advanced users, for manipulating files (see page 13 for a quick guide to analysing answers).

When answer files are created, they are normally generated in the same folder as the test to which they relate, although this behaviour can be overridden (see *Command line parameters*, page 42). In order to analyse the files, they must be present in one of the locations currently known to your copy of *Mentor Publisher* (see page 10 for more on setting locations).

Once a test is finished with, there is no reason not to move the answer file, although remember that you will need the corresponding test file if you wish to analyse the answers in context (see page 16). If you move the answer file away from the same folder as the test and somebody takes the test again, then a new answer file will be generated in the same folder as the test.

Statistics

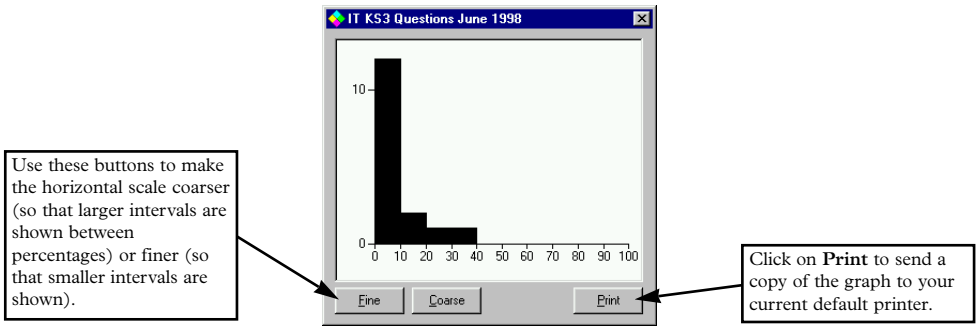
When an answer file has been loaded for analysis, some summary statistics are displayed. You can perform additional analysis on the results by exporting the data as a report, and importing it into your favourite spreadsheet or statistical analysis package (see the analysing package's manual for details on importing data).

The summary statistics are:

n	The number of attempts made at the test by all students
Mean	The average percentage score
Median	The 'middle' percentage score (ie the score that was bettered by half the students)
SD	The standard deviation of the scores; this is only calculated when at least ten students have taken part
Min-Max	The highest and lowest scores achieved

Graphing features

Mentor Publisher allows you to produce graphs of the performance of the students in an answer file. Clicking on the **Graph** tab calls up a histogram showing the number of students that fall into each percentage score bracket. Click on **Pop Out** to display the graph in its own window (as shown below). Subject to memory constraints, you can have as many of these windows open as you wish, allowing you to compare graphs for several tests at a glance. You cannot, however, have more than one window open for the same set of answers.



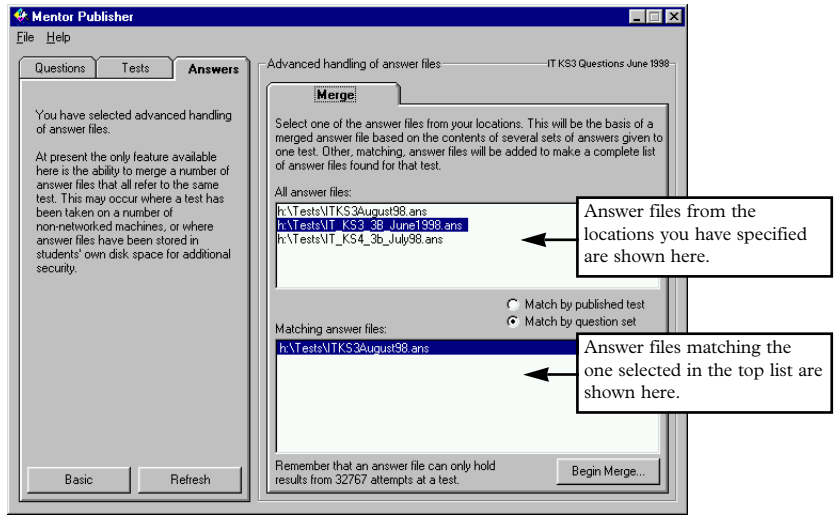
Merging similar answer files

This feature is for advanced users only and should be used with extreme caution.

There may be times when a number of separate answer files have been generated that all relate to the same published test. For example, a test may have been run on a number of non-networked machines, or taken at a number of remote sites. *Mentor Publisher* provides tools for merging such files into a single answer file for ease of analysis.

The same tool can also be used for combining answer files relating to several similar, but not identical, tests. In general, this means tests that have exactly the same content but were created on different occasions – for example, when a test has had to be republished because the original file was damaged or deleted in error.

Clicking on the **Advanced** button on the **Answers** tab brings up the advanced answer handling display, as shown below, which allows the merging of answer files.



To merge files, select an answer file from the upper list. Matching files (answer files that were generated by users taking identical tests) will then be shown in the lower list.

Click on *Match by question set* if you want to search for answer files containing responses to any published tests derived from the same question set as that to which the selected answer file corresponds; click on *Match by published test* to search for answer files containing responses to the same published test as that to which the selected answer file corresponds.

Select the answer file(s) you want to merge with from the lower list. You can hold down the Control key while selecting to select multiple files. When you are ready, click **Begin Merge…** to merge the files. A dialog box will appear allowing you to select a name and location for the merged answer file.

You need to take care when using this feature since it is possible to combine answers from several files that do not really belong together, and so to generate answer files that have no real meaning when analysed.

On the other hand, this feature, used carefully, does allow teachers to run tests with several different groups independently, and then to combine and analyse the answers.

Clicking on the **Basic** button will hide the advanced answer handling display, and return you to regular analysis of answer files.

Command line parameters

The behaviour of *Mentor Receiver* can be modified and restricted using various command line parameters. These may be used to set up a folder of shortcuts in Microsoft® Windows 95 or a set of program group items in Windows 3.x; for example, where each shortcut or program group item leads directly to a specific test. Alternatively, users can be assigned their own shortcuts, each of which forces a particular user name.

Access to the parameters has been provided so that administrators, and teachers with sufficiently advanced IT skills, can more effectively control how tests are taken, and so that students can take tests as easily as possible – without having to worry about the 'mechanics' of the system.

The parameters fall into three major categories: connection, test, and identity – these correspond to the three tabs on the *Mentor Receiver* logon screen. In the examples that follow, the path to the *Mentor Receiver* executable is assumed to be:

```
C:\Program Files\enable\mentor\receiver.exe
```

The path may vary according to the operating system version you are using, and the location into which you chose to install the software. Users of Windows for Workgroups 3.x will be using the executable called `receiv16.exe`.

It is possible to administer tests with considerable subtlety using these parameters. If you are in any doubt about how to set up shortcuts or use these parameters to best effect, you should seek the advice and help of your IT support staff.

Overview of parameters

/a	Answer location override
/b	Progress bar control (for timed tests)
/c	Connection
/d	Debugging*
/e	Error message suppression
/host	Internet host for question analysis*
/i	Identity of test participant
/l	Logging (for debugging use)*
/n	Network performance 'tweaking'*
/p	Ports used for Internet communication
/r	Registry settings override
/t	Test file
/temp	Temporary file location

* These features are not documented in this manual, and are included now for future compatibility. More information may be available on the Enable Web site.

Connection

It is possible to preset the connection that will be made when *Mentor Receiver* starts up. Once the connection has been preconfigured in this way, students cannot override it. To preset the connection, the 'c' switch is used, eg:

```
"C:\Program Files\enable\mentor\receiver.exe" /c ...
```

To preset the connection to a particular folder, so that only tests whose files are stored in that folder will be accessible, the parameter should take the form `p:pathname`. For example, to set the software to only look for files in folder `C:\TEMP`, you would use:

```
"...receiver.exe" /c p:c:\temp
```

You can also preset the connection to point to a particular machine which is running *Mentor Publisher* in Internet mode. The three types of Internet connection specification – hostname, IP address and mentor code – can be preset using the letters 'h', 'i' and 'c', thus:

```
"...receiver.exe" /c h:questions.pearson.co.uk

"...receiver.exe" /c i:194.193.116.129

"...receiver.exe" /c c:PILIBWFB
```

To alter the ports used by *Mentor Receiver* to communicate with a test server, use the 'p' switch:

```
"...receiver.exe" /p 1013.1014
```

The first number is the port used to exchange information about tests with the test server, and the second is used for receiving messages; the default settings are used here. The same switch is used to configure *Mentor Publisher*.

For more information on using the Internet features, see *Internet operation* on page 50.

If you preset the connection location, be it a folder on an accessible drive or an Internet connection, and there are no tests available there, then the software will be unusable; there is no way to override these parameters once the software has been started.

Test

You can preset the particular test that is to be taken in a number of ways – you can specify the exact file that is to be used, or you can narrow down the files that are available, either by filename or by the descriptive name that was given when the test was published. All of the test-setting parameters are accessed using the 't' switch.

To preset the path and filename of the exact test file to be taken, use the letter 'f'. For example, to launch *Mentor Receiver* with the file `c:\temp\geogKS3.qis`, you would use the command:

```
"...receiver.exe" /t f:c:\temp\geogKS3.qis
```

This is equivalent to launching *Mentor Receiver* by opening the .qis file itself.

To specify a word or phrase that must appear in the filename of the test (ignoring case), you would use the letter 'w'. The following command would ensure that only tests with the characters 'ks3' in the filename were made available to the student:

```
"...receiver.exe" /t w:ks3
```

To select tests with particular text in their descriptive titles (ignoring case), use the letter 'x', as shown in the following example:

```
"...receiver.exe" /t x:january
```

In order to use these kinds of filtering to administer your tests, you need to name published tests (filenames and/or test names) in accordance with some sort of regular scheme. You can choose a scheme that suits your school. You might, for example, always include a year group code in the filenames. You could then set up shortcuts to tests for each year group separately.

Identity

It is similarly possible to specify the exact user identity to be used when a test is taken, or to force the name used to comply with a particular pattern. The switch 'i' is used to specify identity restrictions, with the letter 'n' indicating an exact name, and 'o' indicating that names containing a specified portion of text should be displayed:

```
"...receiver.exe" /i n:BANNISTER Roger

"...receiver.exe" /i o:smith
```

If an exact name is specified and it is not one of those names available when a test is published for named users, then the test will not be available.

The pattern match is only applied to tests that are published for named users, in which case the names are filtered before being displayed to the student.

A typical use of this control would be to allow you to publish a test for an entire year group of students at once, so that their results

could be analysed together, but to allow them to take the test only in, say, tutor groups. This would be achieved by recording their names as Name, Surname, and Tutor Group. This information is readily available to most schools in electronic format, ready to be imported into *Mentor Publisher*.

Answer file location

There is also a command line parameter that allows you to specify that the answers to a test should be stored in a particular location. In normal operation, the answer file is stored in the same folder as the test, but, depending on your network setup, that may be neither possible nor desirable.

Allowing control over the location in which the answer file is stored also means that the same test could effectively be published for a number of different groups by providing each with a shortcut that specified a different folder for the storage of their answers. This means that whenever each group uses a particular test, their answers are automatically stored along with any previous answers for their group. The answers could then later be combined using the advanced features of *Mentor Publisher* if analysis of the answers for all the groups together were required (see page 40).

The following settings would specify that all answer files were to be generated in a folder specifically for Mr Smith's tutor group:

```
"...receiver.exe" /a c:\smithgroup\
```

Any folder specified must exist already.

This setting does not apply to tests taken using the Internet mode of *Mentor Receiver*, where the answers are returned to the remote copy of *Mentor Publisher*, and are not saved directly by the receiving software.

Registry settings override

In Microsoft® Windows 95, 98, and NT systems, *Mentor Question System* stores various settings in the system registry. Some networked computers are set up so that programs are not permitted to write to the registry. In this case, *Mentor Publisher* or *Mentor Receiver* will report errors like "Error saving setting...".

You can use the /r command line parameter to avoid this problem. This lets you specify a file where the *Mentor Question System* will store all its settings instead of using the default (registry) location. For example:

```
"...receiver.exe" /r c:\settings\mymentor.ini
```

Note that the settings stored in the registry include the information you enter when you register *Mentor Question System*. If you run *Mentor Publisher* using this command line parameter, make sure it has been registered with the parameter in effect.

To turn off registry-related error messages (like those mentioned above) use the 'e' switch with 'r' (for registry) as a parameter, as follows:

```
"...receiver.exe" /e r
```

Temporary file location

When an automation question is answered in *Mentor Receiver* or previewed in *Mentor Publisher*, the *Mentor Question System* will write out a temporary file for the associated application to use. This will normally be placed wherever Microsoft® Windows keeps its temporary files (usually c:\temp or c:\windows\temp).

You can make it write the file to a different folder using the /temp command line parameter. For example:

```
"...receiver.exe" /temp d:\temp
```

This would store the temporary file in the folder d:\temp. *Mentor Question System* will delete the temporary file when it exits.

Other parameters

To turn off the progress bar, use the 'b' switch thus:

```
"...receiver.exe" /b off
```

Warning

It is quite possible to include command line parameters such that a student is not able to access a test; where their name is not permitted for some reason, or where a preset location contains no files that match a wildcard.

You should always try out a shortcut or set of parameters before using it, since failure could waste class time.

Internet operation

Configuring *Mentor Publisher* as a test server

You can use *Mentor Publisher* to publish tests using Internet protocols, rather than allowing users to access the published tests on local drives.

In this mode, *Mentor Publisher* acts like a file server that dispenses only published test files. These files are loaded into the serving computer's memory, and are sent across the network to any copies of *Mentor Receiver* that are authorised to access them.

Answers are returned using Internet protocols too. For this reason, the copy of *Mentor Publisher* must be left running for the duration of the test – it has to be able to receive any responses from users taking the test, and to save them to an answer file.

Henceforth, the copy of *Mentor Publisher* that is running in this mode is referred to as the test server*.

By default, the answers are saved to the same folder as the original published test, exactly as if the test were being taken across a local network. It is quite possible, and acceptable, to publish the same test on a network and by Internet protocols at the same time.

* Although the test server uses Internet protocols, it should not be confused with a Web server or file server. The test server can *only* be used to run Mentor-style tests in conjunction with copies of *Mentor Receiver*.

Selecting Internet mode

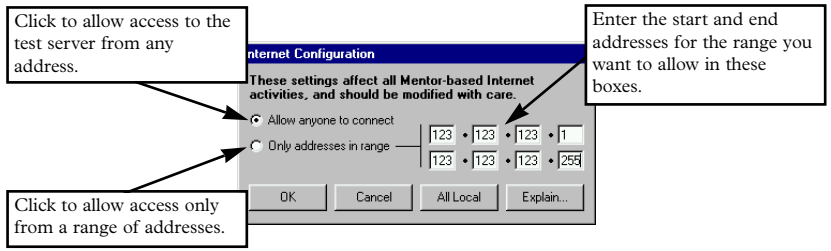
Internet mode can be turned on and off by selecting **Internet Mode** from the **File** menu. When Internet mode is selected, a new **Internet** menu will appear on the menu bar, giving you access to configuration options and the chance to publish tests for Internet use.

You cannot turn off Internet features whilst tests are being taken using Internet protocols.

Running a copy of *Mentor Publisher* in Internet mode on a machine where a Web server is running may interfere with the operation of the Web server; you are advised not to do this.

Changing settings

Selecting **Configure...** from the **Internet** menu calls up the dialog box shown below. This allows you to add an additional measure of control over access to your test server.



Clicking on **All Local** sets the range of permitted addresses to the complete Class C IP address range that encompasses the address of the test server. For example, if the address of the test server is 123.123.123.123, then any addresses beginning 123.123.123 will be allowed to connect. In some cases this may be too restrictive – if in doubt click on **Explain...** for more information, or speak to your IT support staff.

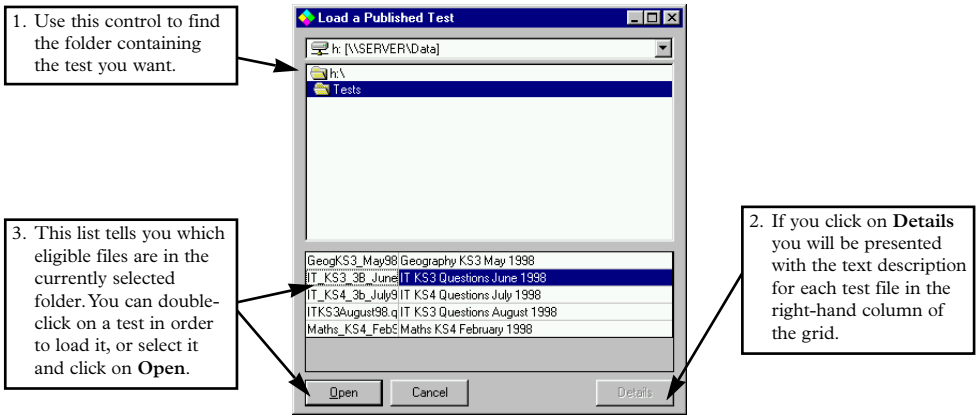
Finding the computer's Mentor Code

In order to find out the Mentor Code for the machine currently acting as test server, select **Show Mentor Code** from the **Internet** menu. This code can be used by students to specify a connection to the test server in the logon screen of *Mentor Receiver*.

You should be aware that, as this code is based upon the IP address of the test server, it will a) vary from machine to machine and b) may vary from session to session, especially if your network dynamically allocates addresses (eg using a DHCP server). See your network administrator if you want more information.

Adding tests

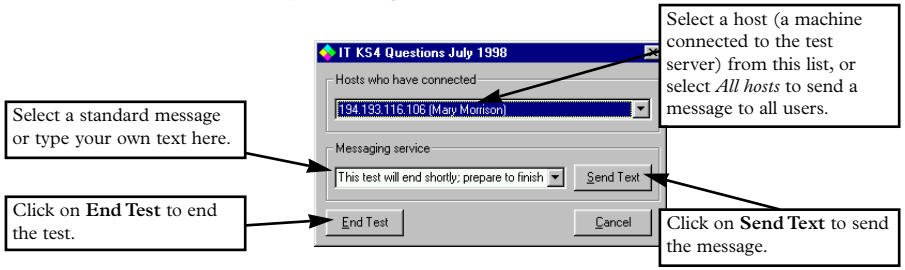
To start publishing a test, select **Put a Test on the Internet...** from the **Internet** menu. You will then be presented with a dialog box which allows you to browse local drives for test (.qis) files.



As soon as you load a test, it is available to users accessing the test server using copies of *Mentor Receiver*. Subject to memory limitations, you can run as many tests as you like simultaneously by loading each in turn as described above.

Examining and stopping tests

Tests that are published for Internet use, as described above, will be listed under the **Internet** menu. Selecting one of the tests in this list calls up a dialog box, as shown below:



Using this dialog, it is possible to see who has connected to the test (by IP address), and to try to send a message to copies of *Mentor Receiver* running at those addresses. Bear in mind that some of the addresses may no longer be valid (if a machine has been shut down, for example). Sending a message to all of the machines may take some time.

Clicking on **End Test** ends the publishing of the test using Internet protocols. Students who are still taking the test will find that they cannot submit their answers any more, which could potentially cause some disruption. Tests should only be ended in this way once it is safe to do so (ie when all students have completed the test).

If you end a test by accident, you can add it again, but students may have experienced disruption during the time the test was unavailable.

When students try to connect to a location that is offering tests using the Internet mode they may find their connection is refused. This may be because the location is incorrect (eg an IP address doesn't point to a valid machine), because the publishing machine is configured to disallow access to them, or because there are no tests yet added.

Tests published in this way can only be viewed using *Mentor Receiver*. It is *not* possible for users to access the tests using conventional Web browsers. If users try to connect to a test server in Internet mode using a Web browser, they will be presented with a message to this effect.

Tests published using Internet protocols are more secure from tampering, and can theoretically be taken from anywhere in the world that has an Internet connection. They do, however, take longer to load. It can also take longer to store student answers, which might mean, if the test server were very busy, that students would experience a delay when moving from question to question as their answers were being relayed.

You should keep an eye on the test server whilst a test is in progress since, if an error message appears, students will not be able to access the server until you have dismissed it.

Obtaining extended feedback on tests

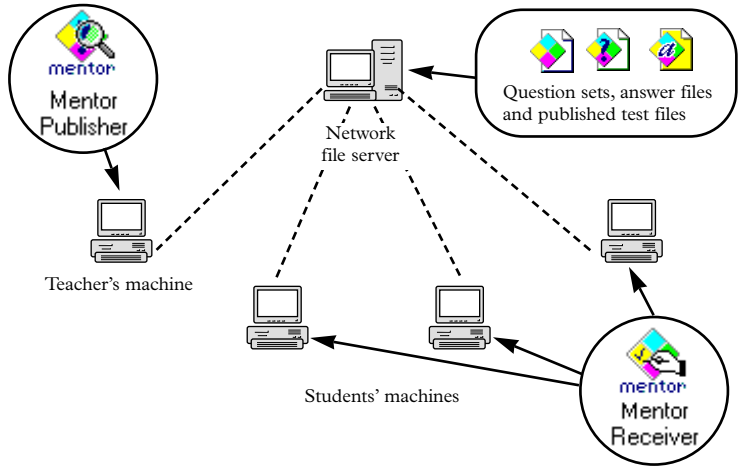
When users are presented with end-of-test feedback, they have the option to submit their answers to an Internet server for further analysis. This feature is only available on certain tests (eg those included with some adult professional development courses) and will rarely be used. A 'live' Internet connection is required to use this feature.

Network installation

This section details how to install the *Mentor Question System* on a network, including an examination of a typical network installation. However, there are many different types of network in use, and they may be configured differently, so the information presented here should be regarded as guidance only; you may need to do things differently on your network.

A typical installation

The diagram below shows the location of the various elements of the *Mentor Question System* (programs and datafiles) for a typical installation:



In the following installation procedure, it is assumed that all machines on the network boot from their hard disk drives, and that applications are stored on each machine's hard drive, rather than centrally. See page 57 if you wish to store the applications comprising the *Mentor Question System* centrally.

Create directories

Decide where you want to store question sets, published tests and answer files, and create directories for these on your network file server. Set access permissions on the question sets directory according to your preference, but make sure that the published tests directory can be written to by students, as this may be necessary for *Mentor Receiver* to be able to store their answers while they are taking a test.

Obtain question sets

Follow the instructions that came with your CD-ROM to retrieve (or unlock) the question sets you have purchased, and save them into the directory you created on the file server.

Install and configure *Mentor Publisher*

On a machine set aside for use by teachers, install *Mentor Publisher* (see page 5 for more detailed information); check the boxes marked *Mentor Publisher* and *System Files* in the installer. Start *Mentor Publisher*, and specify the locations of your question sets, published tests and answer files (on the file server) as described on page 10. You may wish at this point to publish some tests; if so, then do so as detailed on page 11.

Install and configure *Mentor Receiver*

On *each* of the students' machines, install *Mentor Receiver* (see page 5), checking the boxes marked *Mentor Receiver* and *System Files* in the installer, and start the program. Connect to the location containing your published tests, and select a test. Now quit *Mentor Receiver without* taking the test. Next time the program is started, it will automatically connect to that location.

The network is now ready for students to begin taking tests.

Other types of installation

Machines boot from hard disk drive, but applications are stored centrally

If your network is configured so that each machine boots from its own hard disk drive, but you want to store the *Mentor Receiver* and *Mentor Publisher* applications centrally on a network file server, then:

- install *Mentor Receiver* and *Mentor Publisher* into the directories of your choice on your file server, checking the boxes marked *Mentor Receiver* and *Mentor Publisher* respectively, but unchecking the box marked *System Files*
- on each machine on the network, run the installation program, checking the box marked *System Files*, but leaving the boxes for *Mentor Receiver* and *Mentor Publisher* unchecked.

If your network contains a mixture of Windows 3.x (16-bit) and Windows 95/NT (32-bit) machines, then you might want to either:

- Install the 16-bit version only on your file server – this version will also work on 32-bit systems. If you are performing the installation on a 32-bit machine, you can force the installer to install the 16-bit version by unchecking the box marked *Install 32-bit version*. Make sure you also clear the checkbox when installing the system files on the students' machines.
- Install both 16- and 32-bit versions of the software. Install each version into a separate directory, and make sure that a shortcut to the correct version is set up on each student's machine.

Storing each student's answers in their own directory

The best way to do this is to set up a shortcut (on Windows 95/98 or Windows NT 4 or above) or a program group item (on Windows 3.11) for *Mentor Receiver*, and include a command line parameter to set the location of the answer file. The target of the shortcut (on Windows 95/98) or the command line for the program group item (on Windows 3.11) should be of the form:

```
"...\receiver.exe" /a c:\mydirectory\
```

where mydirectory is the student's home directory. Replace the path shown for *Mentor Receiver* with the correct path for your network. It may be that the machines on your network have an environment variable which contains the home directory for a network user, in which case that could be used in the shortcut target/command line, for example:

```
"...\receiver.exe" /a %HOME%
```

where %HOME% is an environment variable containing the user's home directory.

If you wish to combine the answer files into a single file at a later date, you may do so using the advanced answer handling features of *Mentor Publisher* (see page 40).

Disjoint networks

It may be that you have a number of physically separate networks on which you wish to use the *Mentor Question System*. In this case, you should perform the installation as detailed on page 55, treating each network separately. When publishing and running tests, however, please bear in mind that it is important to maintain consistency between files containing published tests and answers on the different networks; if you want to run the same test on two networks, then publish it *only once*, and copy the file containing the published test to each network in turn. This will ensure that the answer files are all compatible with each other if you want to combine them later.

Installing on RM Connect networks

There are a number of things to bear in mind when installing on an RM Connect network:

- Perform the installation on a *clean* machine (ie one with only a minimal set of software packages installed on it), ensuring that the box marked *System Files* is checked in the installer.
- If the installation program prompts you to restart your machine, you are advised to do so, as this enables system files that are in use to be replaced. Otherwise, your package may be incomplete.
- Make your package after performing any default configuration necessary in the application, eg setting the network location in which tests can be found by students. Remember that most settings can be overridden or set by parameters attached to shortcuts, so this is not a major consideration.
- If you want to manually alter the package, you may find the file INSTALL.LOG, which should be in the same directory as the application, of use – this lists all the operations performed during installation, including which files were copied.

Help

If you experience technical problems whilst installing or using the software, then please read this section to see if a solution to your problem is presented. If you have an Internet connection, then please also check our support Web site, which will contain up-to-date information on technical problems:

http://www.pearson.co.uk/enable/

If you continue to experience difficulties, then contact Pearson Publishing for technical support on 01223 350555. Be ready to tell us:

- what the problem is
- any error numbers or messages
- what you were doing when the problem occured
- what operating system and network type you have
- any serial or reference number that came with the software.

It is often useful if you can have access to the computer in question when you call. Sometimes it can help if you send files to our support staff, either by email or by post, so try to keep track of files that have given you a problem.

Installation problems

"Could not load or register custom control XXXXXXXX.OCX"

To resolve this problem:

- try moving or renaming the file in question, then reinstalling the software
- 'manually register' the control, as described below:

Windows 95 and NT 4

Click the **Start** button and select **Run** from the **Start** menu. In the dialog box which pops up, type REGSVR32.EXE followed by a space and then the name of the OCX file, eg:

```
REGSVR32.EXE COMDLG32.OCX
```

registers the Common Dialog OCX.

Windows 3.x

Switch to Program Manager. From the **File** menu, select **Run**. In the dialog box which pops up, type REGSVR.EXE followed by a space and then the name of the OCX file, eg:

```
REGSVR.EXE COMDLG16.OCX
```

registers the Common Dialog OCX.

"Object or with block variable not set, OLE automation server unable to create object"

This message usually indicates that a system file is missing. Make sure you have checked the box marked *System Files* in the installer. If you are installing on a network, then please see *Network installation* on page 55.

Other problems

Some labels on dialog boxes have truncated text

If you use a non-standard setting for the font and font size used for menus, button text, etc, then you may find that some of these are truncated. Choose a standard setting instead:

Windows 95 and NT 4

From the **Start** menu, select **Settings**, then **Control Panel**. Double-click on the Display control panel. On the Display control panel, click on the **Appearance** tab, and select **Windows Standard** from the list under *Scheme*.

Click the **Settings** tab, and select **Small Fonts** from the list under *Font Size*. Click **Apply**, then close the control panel.

Windows 3.x

In Program Manager, open the Main program group, and double-click on Windows Setup. From the **Options** menu, select **Change System Settings**. In the dialog box that appears, check that the selected item in the list next to *Display* does not include the words 'Large Fonts'. If it does, then choose an alternative setting.

Make sure you know that the setting you choose works with your display adaptor, as the Windows operating system may not start up if you make the wrong selection.

Automation questions

The application used to run an automation question (often part of Microsoft® Office) is normally launched the first time an automation question is attempted; it will then remain loaded until you close *Mentor Receiver* or *Mentor Publisher*.

On older computers, it can take some time for an application to start up. In this case, you can start the relevant application before looking at the automation question; the question will run using an existing running copy of the application if it can find one. When taking a test in *Mentor Receiver* you should probably open relevant applications before the start of any timed test, so as not to waste valuable test time.

If the application is open before the question is viewed, then *Mentor Question System* will not close the application when it exits.

Automation questions using Microsoft® Access

Please note that for this technique (pre-opening the relevant application) to work with Microsoft® Access automation questions, you should have only one copy of Microsoft® Access running when *Mentor Receiver* or *Mentor Publisher* starts, and it should not have a database open.

What's new in 1.1

Version 1.1 of *Mentor Question System* introduces a host of refinements and new features. Most of them are minor improvements to interface and behaviour which need no explanation, or performance and reliability enhancements which work unseen.

There are some major new features, however, which are summarised below. They are also covered, where appropriate, in the preceding chapters.

We are always looking for ways to improve our software. If you have any comments or suggestions, then please get in touch with us by post or by email (enable@pearson.co.uk).

General changes

New question type: automation question

This type of question tests users on practical skills by asking them to perform tasks using external applications (eg Microsoft® Word or Microsoft® Access).

In order to use these questions, users will need to have the relevant application correctly installed on their computer. For more information on answering automation questions using *Mentor Receiver*, see page 26.

Mentor Question System will launch the relevant application when the questions are being taken (eg Microsoft® Word will have to be running before any Microsoft® Word questions can be answered).

Because the applications can take some time to open, especially on slower machines, users are advised to launch the required application(s) in advance of taking timed tests. See page 63 for further details.

Please note that automation questions that use applications from the Microsoft® Office suite require Microsoft® Office 97 or later.

Automation questions will normally need to write temporary files to the user's hard disk. A command line parameter can be used to override the default location, or to set up a location for temporary files on systems where a suitable environment variable does not exist. For details, see page 48.

Final performance feedback

Tests published with feedback at the end of a test enabled (see page 31) now give users more feedback on their performance, with an option to print the information as a permanent record. The test results may also be submitted to an Internet server for analysis. The response from the server can contain suggestions for further study, analysis of strengths and weaknesses revealed by the pattern of answers, and may give a Web link to further information. The response can be saved as a text file for future reference.

At present, this feature is only available for certain question sets; it also requires an active Internet connection. For further details, see page 29.

Registry settings

Registry settings (eg default window positions, file locations and user preferences) for all applications in the *Mentor Question System* can now be written to and read from a specified external file rather than from the system registry (or INI file under 16-bit operating

systems). A command line parameter will give system administrators control over this feature (see page 48). This can be particularly useful for users operating in a networked environment or where workstations do not have local hard disks.

File format versions

Tests that were created or published using earlier versions of *Mentor Question System* will be updated when they are opened with newer copies of *Mentor Publisher* or *Mentor Receiver*. In some circumstances, a warning message will be displayed to let you know that this is happening.

Error messages

Certain error messages can be suppressed using a command line parameter (see page 48). This facility can be especially useful when an unconventional installation gives rise to 'non-errors' which students can safely ignore.

Changes to *Mentor Publisher*

Adding locations

File locations are now added automatically when relevant files are loaded or saved. This allows users to get started more quickly, but still allows full control over the locations used through the existing **Add/Remove Locations** menu item. By default, new locations are added without warning, but this behaviour can be changed using the new checkbox on the Add/Remove Locations dialog box. See page 11 for more details.

Publishing tests

Published test files are now more compact. You should not be concerned if a test published with version 1.1 of *Mentor Publisher* is much smaller than similar tests published using version 1.0.

Viewing answers in context

When loading the corresponding .qis file for an answer file that you are analysing, you can now automatically search through all current locations for a matching file.

When viewing the content of a .qis file from *Mentor Publisher*, most question types now indicate the correct answer in the preview.

Registering

Mentor Publisher now searches more thoroughly for existing software registrations. For many new users, this greatly simplifies the registration process.

Storing users' answers

It is now possible to specify that a published test should not store answers. This is useful when a test is being distributed on locked media (eg CD-ROM) and you do not want users to worry about specifying a new location for their answers.

In common with other settings for published tests, this setting cannot be changed once a test is published. It should only be used when recording of answers will definitely not be required. See page 31 for further details.

Changes to *Mentor Receiver*

Answer file locations

If *Mentor Receiver* is unable to write to the answer file for a test (for example, if the file is corrupted or locked), the user is prompted to specify an alternative location. Users can also elect not to save their answers at all.

This means that tests (particularly when used for learning rather than assessment) can still be taken even when there is a problem with storing answers.