The Examiner®

Proctor System

Editor User's Guide

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Release 3.1.5

The Examiner Proctor System

Revised: **1 July 2009**
Applies to: **Software release 3.1.5**

Introduction

The Examiner Proctor system is a tool for assigning examinations to examinees under the control of a proctor. The software is ideally suited to applications where a single test is to be administered to one or more examinees after a period of training or instruction. It is also suitable for administering single-try certification examinations.

This software makes use of items banks developed using The Examiner's item banking software. It is assumed that the user of this software is familiar with the concepts of item banking, and has created the item banks and profiles necessary for the generation of exams.

Refer to the "What's New" section at the end of this document for release information.

This manual is now available from within the program by clicking on "Help" and then "Documentation" on the menu bar.

If you plan on using the Menuing options of the Proctor System you should activate the Menuing option before you assign any examinees. Refer to page x for information on activating the Menuing system 13.

Software Components

This software is composed of two main elements:

- Proctor Software – This is the control element of the package. It's main functions are:
  - Select the examinee's that are to see exams.
    - § Create records for the examinees if one does not exist.
  - Assign specific item banks and profiles to the examinee for creation of exams.
  - Optionally specify time windows to limit the availability of exams.
  - Specify examinee restart options that are to take place in the event of an interrupted exam.
  - Create proctor records for monitoring examinees.
  - Assign examinees to proctors for double-password protection.
  - Monitor examinee status.
- Examinee Software – This is the element that controls an examinee's interaction with the system.
  - Handles the login of examinees that have been created with the Proctor software.
  - Provides for double-password protection with a secondary proctor password entry.
  - Automatically generates examination from the description contained in the routing database.
  - Presents exams to the examinee.
  - Adds completed exam information to a records database.

Database Components

The software interacts with three main databases:

- Router database. This is an Examiner proprietary database that contains:
  - Header information containing general system configuration and global options.
  - Examinee log in information containing exam assignments
  - Proctor log in information
- Records database. This is a Microsoft Access compatible database that contains:
  - Examinee ID and Name information
  - Exam records and history information
- Item Banks. These are an Examiner propriety database that contains items and examination profiles. It is created using the main Examiner item bank editing software.

Installation

The software is installed by running "`setup.exe`" on the installation CD-ROM or CD-ROM image. The software can be loaded to a network server or to the local machine. Whether running off the network, or on a local machine, as series of Windows support files such as DLL's and OCX's will be installed on the local machine. During installation, a choice can be made as to which of the software elements are to be loaded. Either or both the proctor and student elements can be selected. As installed, the student software cannot be run until it has been configured.

The Examination Records system, installed with the main Examiner system, must be present if examinee records are to be viewed.

Steps to Setting up a Learning Center

The "how" of each of these steps is discussed in the following section. This is a summary of the steps needed to get a learning center "up and running".

1. Create folders on a shared drive that will hold the item banks (.XM3 files), router file (.XRT), and history file (.MDB). Make sure that this folder can be "seen" from all the machines that need to use the software and the all users have Read/Write/Create/Modify/Delete access to these folders.
2. Install the software on the "proctor machine", installing both the Proctor Editor and the Proctor Delivery elements.
3. Run the Proctor Editor and create the router file and history file in the shared folder created during the first step.
4. Assign a single exam.
5. Install the software on the delivery machines, installing only the Proctor Delivery element.
6. Modify the shortcut to the delivery software adding a "-d" command-line option that references the router file created in step 3.
7. Run the software on the delivery machine verifying that the test has been created correctly.
8. Using the Examination Records software verify that the test results have been correctly stored in the history file created in step 3.

Operation of Software – Proctor Element

Two Modes of Operation

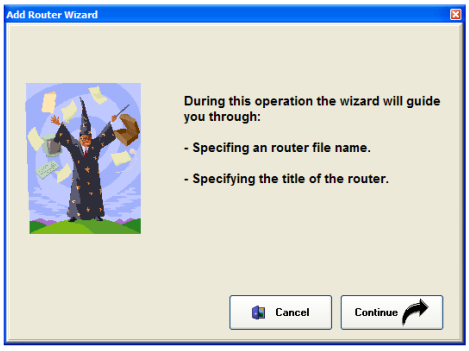
The proctor system has two modes of operation:

- Standard Mode – Exams are assigned one-by-one. In essence, the exams are "queued". An examinee can be assigned a number of exams. As one is completed, the next one "in the queue" will become available.

- Menuing Mode – Sequences of exams are defined in a “Menu”. Rather than assigning an examinee to an exam, the examinee is assigned to a menu. Controls within the menu determine how the examinee will interact with the pre-defined sequence of exams. In many ways this mode operates like the now-obsolete Examiner “Menu Maker” system.

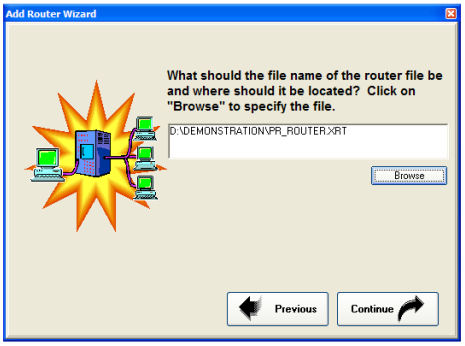
First Time Use

The first time you launch the software it will appear as a “blank slate”. You will perform a number of initialization steps to prepare the software for use. To start, click on “File” and then “New” in the menu. The creation of a Proctor System database is the same whether you are going to be using the Standard or Menu mode.

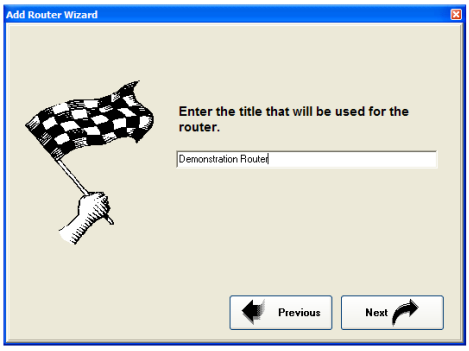


You will next see a series of “Wizard” displays that will walk you through the initialization process.

The first file that will be created will be a special file containing the test assignments.



Click on the white box or “Browse”. Move yourself to the folder that is to contain your router control file. Enter the name of the file, click on “open”, and confirm the creation. The file will be created with the extension “.xrt”. Click on Continue.



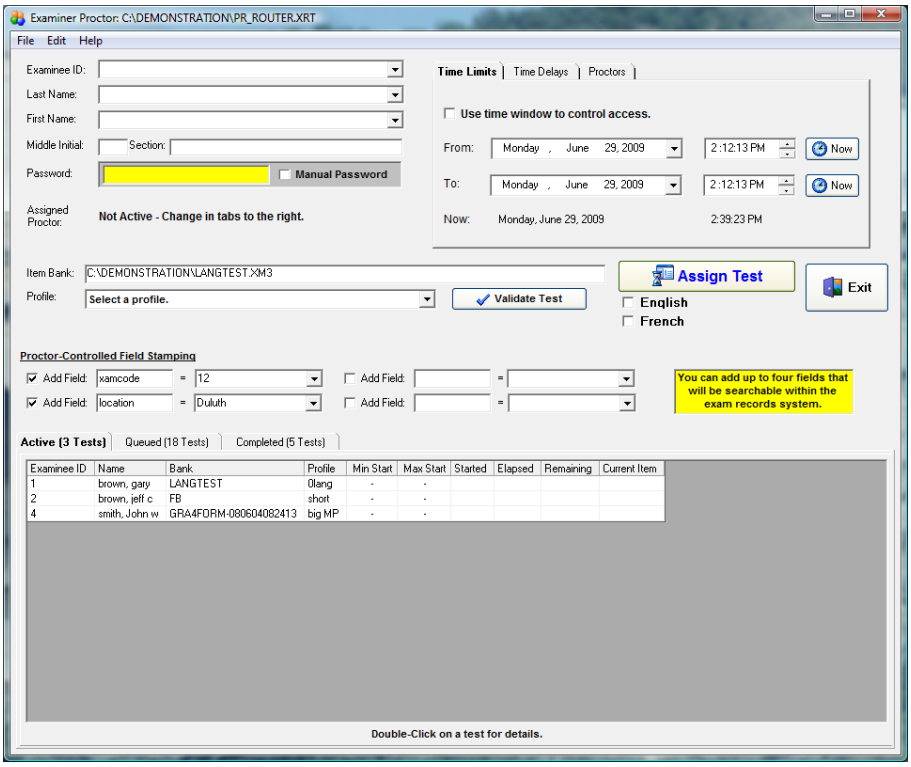
Specify a title for the router. Click on Next.

A “history” file is used to store completed examinations. If you already have an Examiner history file click on the white box to browse and select it. If not, click on the “Create New History File” button to browse to a location and create the file.

When you click on “Continue” the connections will be made. A final confirmation screen will appear and you will be returned to the main Proctor page.

Standard Mode Proctor System Operation

If you want to use the Proctor System in Menu mode, skip forward to the “Menu Mode” section of this document on page 13.

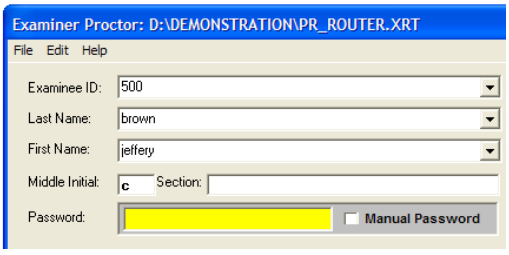


The Proctor System control screen has three main parts. The top third of the screen is used to select and control the examinee. The middle of the screen is used to assign tests. The bottom third of the screen is used to view examinee status.

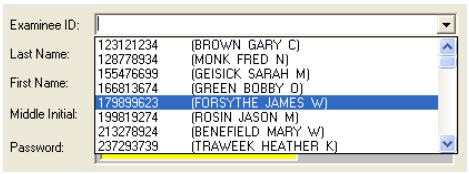
Assigning a Test to an Examinee

As a default, the system is in single-test mode. It is possible to assign a menu containing multiple tests to an examinee. See the Menu Sub-System section of this document.

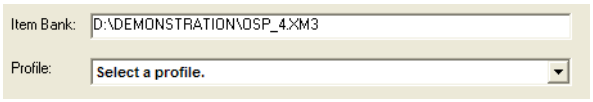
Follow these steps to assign a test to an examinee.



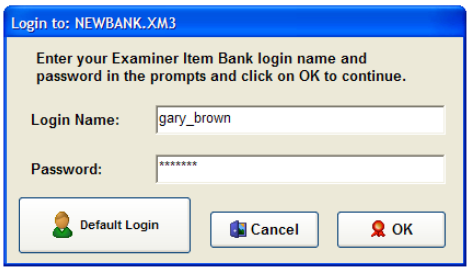
Enter an examinee’s ID and name information into the appropriate fields. After entering an ID, the system will check to see if that examinee already exists. If so, the rest of the fields will be automatically filled in.



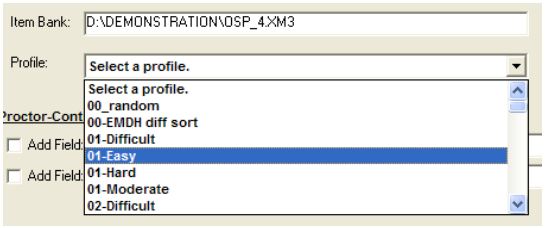
If there are already examinees in the history file you can use the drop-down option to select the examinee from the list.



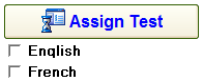
You next need to specify the item bank. Click on the white box next to “Item Bank”. A browse box will appear allowing you to select a bank. The system will remember this bank for future use.



If the bank is protected with a login password you will need to enter the information before proceeding. If a default login is available you can click on the “Default Login” to use the item bank without a password.



Specify a profile by using the drop-down menu. All the profiles in the attached item bank will be available. You should make sure that the “Validate” option has been used in the Item Bank editor to assure that the profile is able to generate a test!



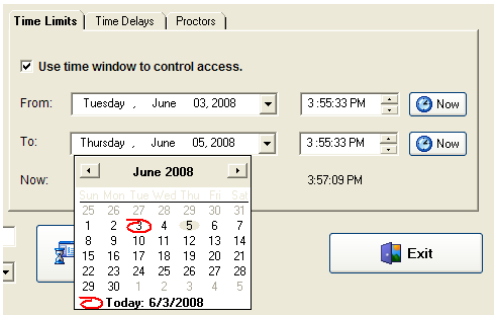
If the attached bank is multi-lingual enabled the languages available within the bank will be shown. When assigning or validating a test you must select at least one of the languages. If the item bank is <u>not</u> multi-lingual the check boxes will not be shown

Click on the “Assign Test” button to assign the test to the examinee. If the examinee already has an assigned test you will be notified that the test has been added to the examinee’s test queue. The examinee <u>must</u> take the tests in the order in which they have been assigned.

If the “Manual Password” option has not been selected a randomly generated password will be assigned to the test. The examinee must use this password to gain access to the test.

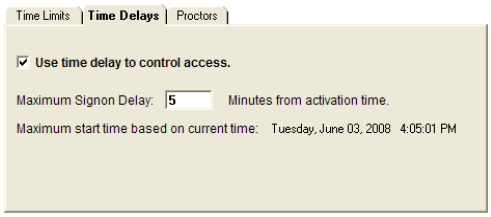
If you want to manually assign a password, make a tic in the “Manual Password” box and enter a password.

Additional options are available to control access to the test. These options are located on the series of tabs in the upper-right corner of the screen. The settings imposed by these options can be removed or changed by double-clicking on an existing test assignment.



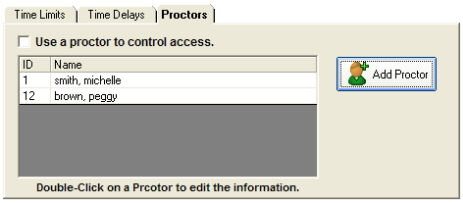
Time Limits

Check the "Use Time Window..." box to limit the time that an examinee can start a test. Click on the date or time fields to adjust the limits. To set a limit to the current date and time click on the "Now" button.



Time Delays

Check the "Use Time Delay…" box to use this option. In the white field enter the number of minutes that the examinee will have to start the test. This time is calculated from the point that the "Activate Test" button is clicked.

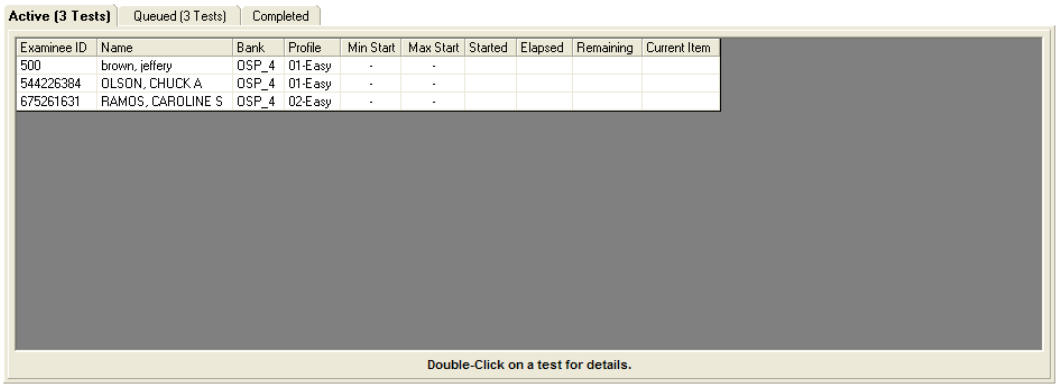


Proctors

If proctors are used a secondary login screen will be shown after an examinee enters their initial login information. To use a proctor, click on the box and select a proctor from the list by clicking on it one time. Use the "Add Proctor" button to add a new proctor to the system. Existing proctors can be edited by double-clicking on the proctor's entry.

Test and Examinee Status

Assigned, queued, and completed tests are shown at the bottom of the screen:



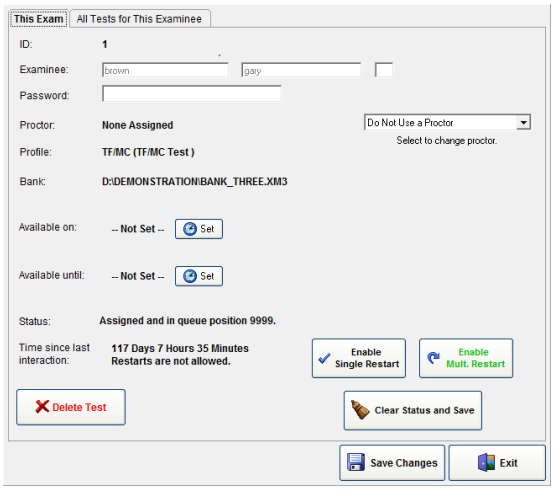
The first tab shows tests that are either in use or have been assigned. If an examinee has more than one test assigned only the "top" test in the queue will be shown on this screen.

The second tab shows queued tests while the third tab shows tests that have been completed. A button is available on the third tab to clear the list of completed tests. Note that this only clears the list, it does not remove the examinee's record from the history database.

To view or edit an examinee's test assignment, double-click on the test entry.

Editing a Test Assignment

Double clicking on an assigned test will show details on that assignment:



You cannot change the options of an examinee that is currently taking a test! Clicking on an option will make it active for the next time an examinee starts the test. The action of most of the options is described earlier in this document where they are assigned. A few options need further explanation:

Examinee Name

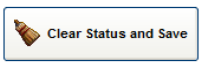
If you change the entry for an examinee's name, all the tests assigned to this examinee will have the name changed.

Password

You can change or clear an examinee's password. The password is not case sensitive. If you click on "Clear" the examinee will not have to enter a password when logging in. Remember that each test is a separate entity. Changing the password on a test record affects only the record that is currently being edited.

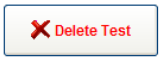
Restarts

If a test is interrupted by a computer problem you can allow the examinee to restart the test at the point where it was interrupted. To let the examinee restart only once, click on the "Single Restart" button. To allow multiple restarts click on the "Mult. Restart" button.



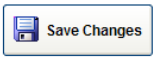
Clear Status and Save

When menus are used with the "mastery required" feature enabled you need to clear the "scored" status of a test before the examinee can retake the test. Click on this button to do that. This only clears the record in the Proctor system. It does not clear the record in the history system. That record will remain as a history of how the examinee performed.



Delete Test

This will delete the test assignment from the proctor system. If the test is queued the other queued tests will be adjusted appropriately. This does not remove the test from the historical record system. It only removes the test from the Proctor System's assignment database. Once an examinee's record is removed it must be manually re-added.

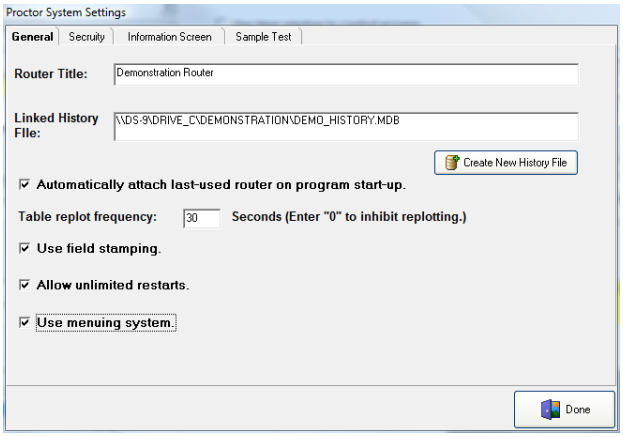


Save Changes

Click on the "Save Changes" button to save your edits. If you click on the "Exit" button and have made changes you will be warned that you will lose your changes.

System Settings

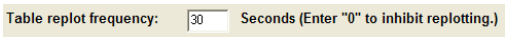
Clicking on “Edit” and then “Settings” in the menu allow the setting of a number of options.



General Tab

The general tab allows you to change the title of the proctor database and to change the history file that is used for the storage of completed tests. Other options are:

If this option is selected the last-used proctor database will be automatically attached when the editor is launched.



You can specify how often the test assignment tables are re-plotted on the main page. If you specify “0” the table will not reflect changes in examinee status unless the “Edit” and “Replot Tables” option is used from the main display.

If checked, the field stamping options will be shown on the main display.

If checked, users can restart their tests an unlimited number of times. This option overrides the restart options within the individual test records.

If checked, use menus to assign sequences of tests rather than individual tests. If you want to use menus it is best that you select this option before assigning individual tests to examinees.

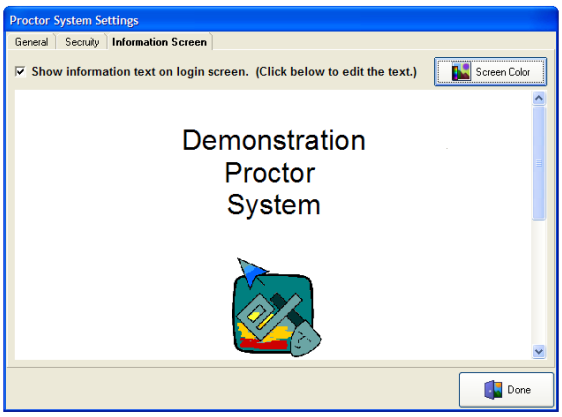
Security Tab

The security tab allows you to set a number of test access features:

If this option is selected the examinee will not be prompted for a password at login.

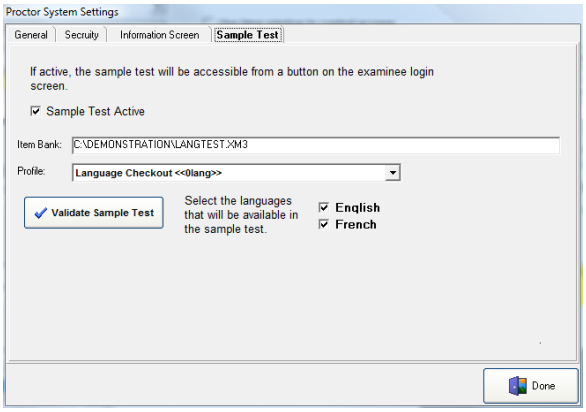
If selected and entered all examinees will use the same password. This option overrides any passwords that may currently be associated with test assignments.

Information Screen



The information screen is shown at the bottom of the examinee's login screen. Click on the text field to edit the screen. You can change the background color by clicking on the "Screen Color" button. To activate the screen put a check in the appropriate box.

Sample Test



It is a very good idea to provide the examinee with a sample test so that they can learn how the system operates before they take their test. The selection of a sample test is done in the same way that a test is assigned to an examinee: an item bank is attached, and a profile is selected. If the attached item bank is multi-lingual the language selection options will be visible.

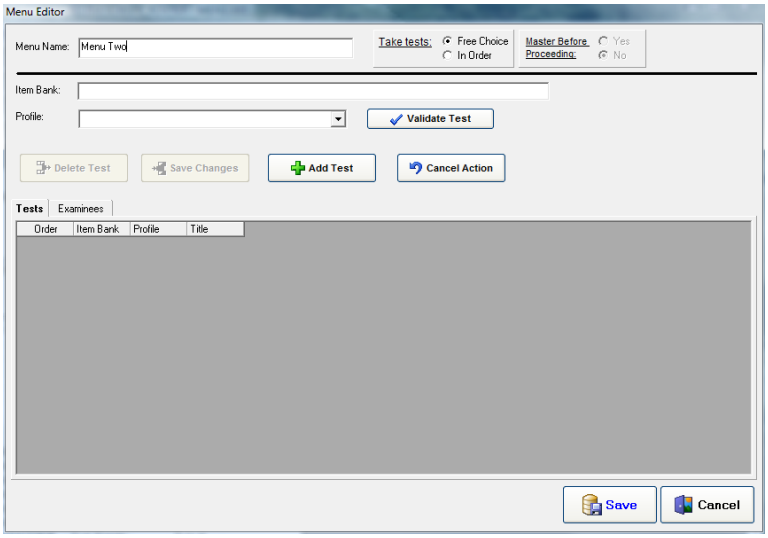
Before you activate the sample test by clicking on the "Sample Test Activate" box you should use the "Validate Sample Test" to make sure the profile will generate an exam. If the attached bank is multi-lingual you must select one or both of the languages before validating or activating the test.

Proctor System Menu Mode

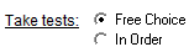
When the system is first used it is in single test mode. To use the menu system click on Edit and then Settings. Within Settings make a check in the "Use Menuing System" box. Save your changes. If you are planning to use the menu system, you should perform these settings before assigning tests to examinees.

The time assignment and field stamping options will be hidden. The proctor assignment options will be the only ones displayed in the upper-right corner of the screen. The menu version of the test assignment section of the screen will change to look like this:

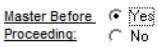
Note that the "Edit Menu" and "Assign Menu" buttons are inactive. You can't assign a menu until you've added one. Click on the "Add Menu" button. The following screen will appear:



Two options that control the operation of the menu are shown at the top of the screen:

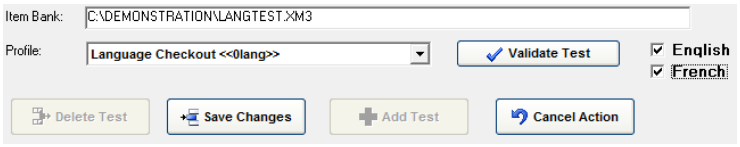


If set to "Free Choice" the examinees can take the test in any order. If set to "In Order" they must complete one before moving on to the next one.



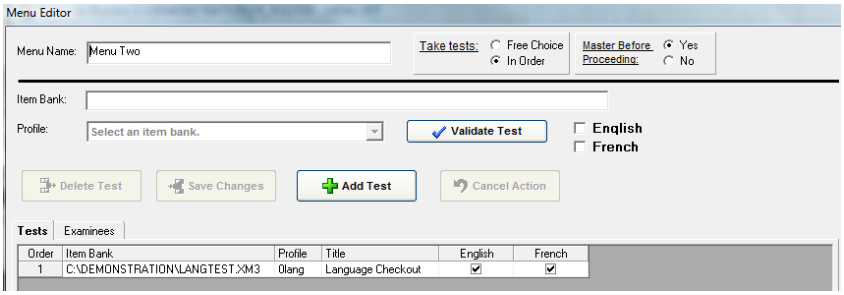
This option is active only if the "In Order" option is selected. If set to "Yes", the examinee must master the test before moving on to the next one. If set to "No", simply completing the test is sufficient to proceed to the next test. If an examinee has not mastered a test and thus is unable to proceed, you can clear the completion status of the examinee, allowing them to retake the test. See page 9 for information on how to do this.

To add a test click on the “Add Test” button. The screen will change:

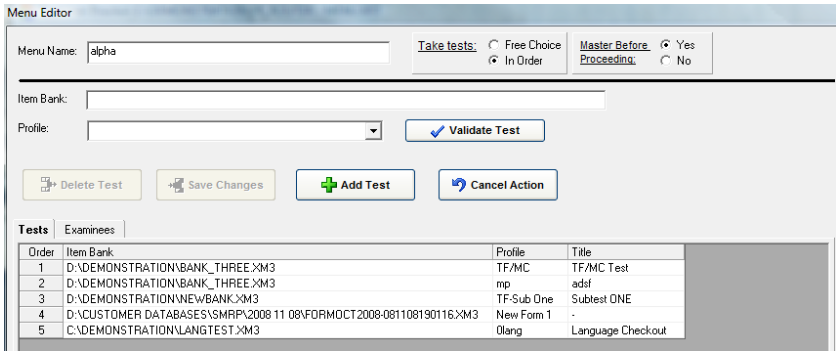


Click on the Item Bank field to browse to and attach an item bank. Once the bank has been selected you can use the drop-down box to select a profile. If the attached bank is multi-lingual select one or both of the languages. You must select at least one. Click on “Validate Test” to make sure the profile is valid.

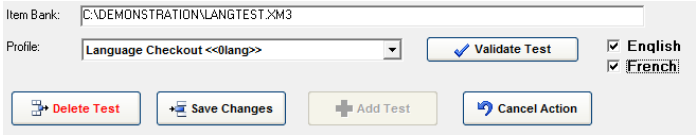
Click on “Save Changes” to add the test to the current menu.



The test you added will be in the list. You can add as many tests as you want to a single menu. By repeating the “Add Test” operation. Tests need not be in the same item bank.



You can edit or remove a test from the menu by double-clicking on the test. The top of the screen will change:

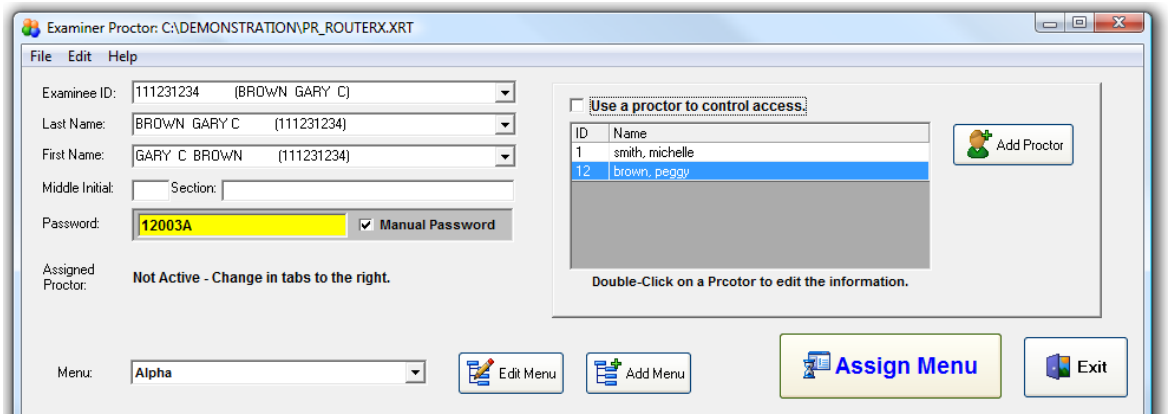


You can change the bank and/or profile. Click on the “Save Changes” button to save changes. If you want to remove the test from the menu, click on the “Delete Test” button.

When you are done editing the menu click on the “Save” button to save your changes. Once a menu has been added to the system the “Edit Menu” button will become available. To edit an existing menu select the menu from the drop-down and click on the “Edit Menu” button.

Assigning an Examinee to a Menu

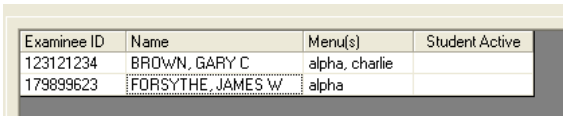
Once you've added a menu to the system you can assign a menu to an examinee.



Follow these steps.

1. Select an existing examinee from the examinee drop-downs at the top of the page or create a new examinee as described earlier in this document.
2. Add a password in the yellow bar. This password will be used for <u>all</u> the tests seen by this examinee.
3. Using the Menu drop-down select the menu you want to assign to the examinee.
4. If you want to use a proctor, make a check mark in the "Use a proctor…" box and select a proctor. The examinee's proctor will need to verify the login before the examinee can see the assigned menus.
5. Click on the "Assign Menu" button.

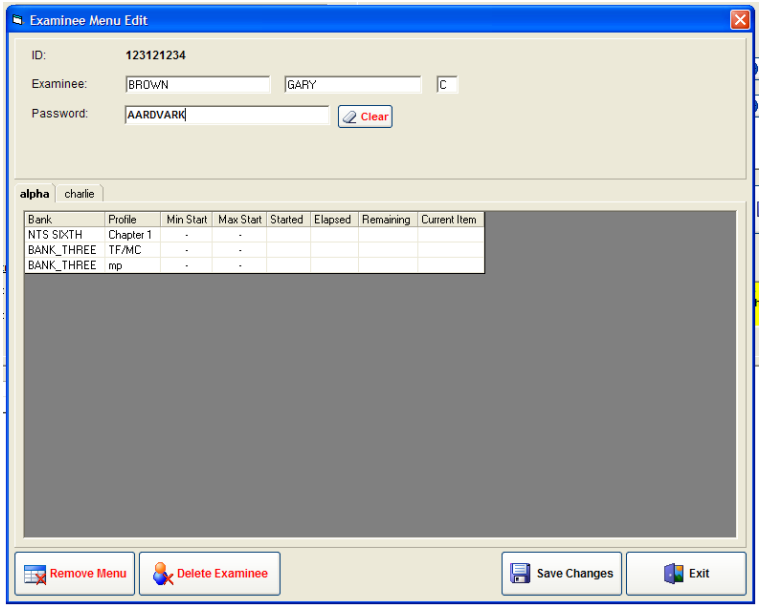
You can assign up to twenty menus to an examinee. The table at the bottom will show the examinees and the menus assigned to each examinee.



Examinee ID	Name	Menu(s)	Student Active
123121234	BROWN, GARY C	alpha, charlie	
179899623	FORSYTHE, JAMES W	alpha	

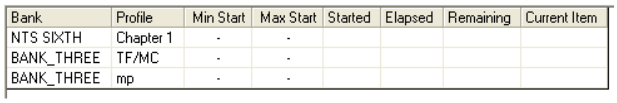
If the student is currently active there will be an entry in the "Student Active" column.

To see the details of the examinee's assignment and to edit the examinee's record double-click on the line for the examinee. An examinee detail screen will be displayed:



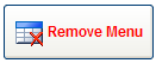
A number of options are available on this screen.

The examinee's name and password can be edited. Click on the "Clear" button to remove the examinee's password.

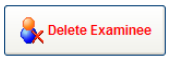


Bank	Profile	Min Start	Max Start	Started	Elapsed	Remaining	Current Item
NTS SIXTH	Chapter 1	-	-				
BANK_THREE	TF/MC	-	-				
BANK_THREE	mp	-	-				

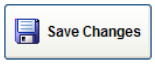
Double-click on a test to edit or view details of the test. The screen that is displayed is described earlier in this document on page 9. Note that you can not edit the examinee's name or password on the secondary screen. You can, however, clear the test status allowing for a retake of a test that was not mastered.



Highlight a menu in the table and then click on "Remove Menu" to remove the menu assignment. You cannot remove the menu if an examinee is currently running a test. Note that if you remove a menu the removal will be immediate and cannot be recovered.



Click on "Delete Examinee" to remove all tests for an examinee. This only removes the test assignments, it does not remove the examinee from the historical records.



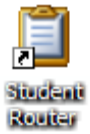
When you are done editing click on the "Save Changes" button.

To leave without storing changes, click on the "Exit" button.

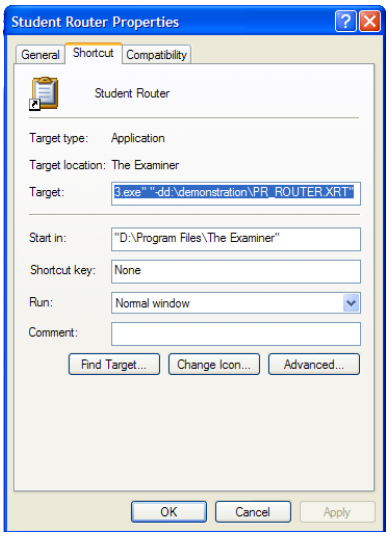
Operation of Software – Test Delivery Element

First Time Use

After the software has been installed a "Student Router" icon will appear on the desktop:



Right-click on the icon and then left-click on "Properties" to set the router's database.



The entry that needs to be changed is the "Target". You need to add the "-d" database option. The line, after editing, should look like:

```
"D:\Program Files\The Examiner\StuRouteV3.exe" "-dd:\demonstration\PR_ROUTER.XRT"
```

The line, obviously, needs to be changed to your own configurations. The important things to note are:

- The "sturouteV3.exe" section needs to be in quotation marks.
- The database line begins with a –d. In the above example, the router database is pr_router.xrt.
- The full path to the database needs to be specified.
- The path needs to be contained within quotation marks.
- There needs to be a space after the end the of ".exe" and the start of the "-d".

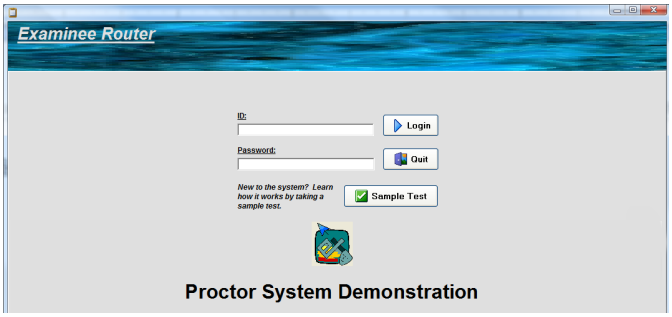
Click on OK to store the property. You can move this shortcut to any location. You can also edit this shortcut in the startup menu.

Launch the program by double-clicking in the icon.

If you don't edit the shortcut, the examinee will see the error message: "FILL IN ROUTER DATABASE" database was not found.

You can have multiple shortcuts, each one using a different router file.

Login Screen



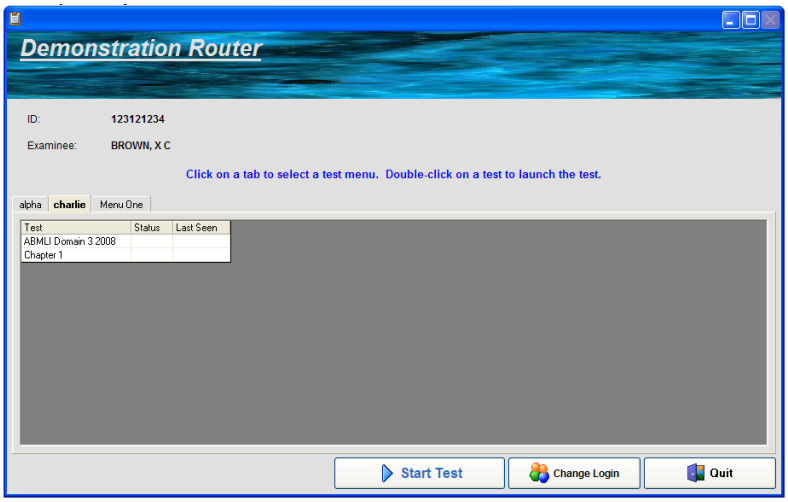
If an introductory text was associated with the database it will be shown at the bottom of the screen. If a sample test was specified, the "Sample Test" button will be shown. The examinee should enter their ID and password at the prompt. If the "no password needed" option has been set the password prompt will not be displayed. The examinee then clicks on the "Login" button.

Standard Test Mode:

If the profile can be found and has been properly constructed the test will be generated and the presentation will begin.

Menu Mode

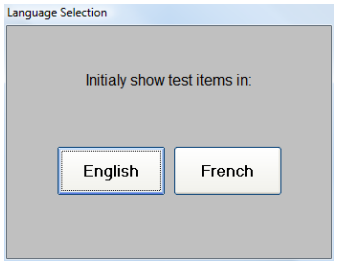
If the menu mode is active and one or more menus have been assigned to the examinee the following screen will be shown:



The examinee can launch a test by highlighting the test and clicking on the "Start Test" button. They can also double-click a test to launch it. "Change Login" will return to the previous login screen. "Quit" will terminate the program.

Language Options

If the multi-lingual option for a test has been set so that both languages are to be available, the following display will be shown before the first item:



The languages shown on the button will be drawn from the bank the test was generated from. The initial language choice will be stored in the Exam Records history file. During the test a button will be shown at the top of the screen:

Clicking on the button will switch the displayed item to the alternate language. The examinee's responses will be preserved between languages, and the alternative ("ABCD") order will be preserved even if the profile has specified randomized alternatives. The language that was displayed when the item was answered will be stored in the Exam Records history file.

What's New

Release	Features
3.1.5	• Added numeric items to the system. • Added multi-lingual capabilities to the system. • Added menuing sub-system. This allows for the delivery of pre-defined sequences of tests. • Added an option to show a sample test.
3.0.027	• Added proctor capabilities to the menu system. • Added the ability to clear the test-completion status of a menu's test so the examinee can re-take the test. This is most often used when sequenced exams are used. (see Page 9)
3.0.011	Interim release. Some features in the bank manager (alpha and numeric items, and some multi-part test scoring and sorting features) are not implemented in the proctor delivery system. Additions to the Proctor System: • Added menuing sub-system. • Corrected problem where non-selectable items were selectable. • Added support for timed tests. • Improved restart capabilities.
3.0.004	Initial pre-release of proctor delivery system.

What's Different from Examiner Version 2

Most of this utility works exactly the same as in Examiner Version 2. A number of little-used extensions to the Proctor System have been removed. Security has been enhanced to prevent unauthorized viewing of assignments.

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