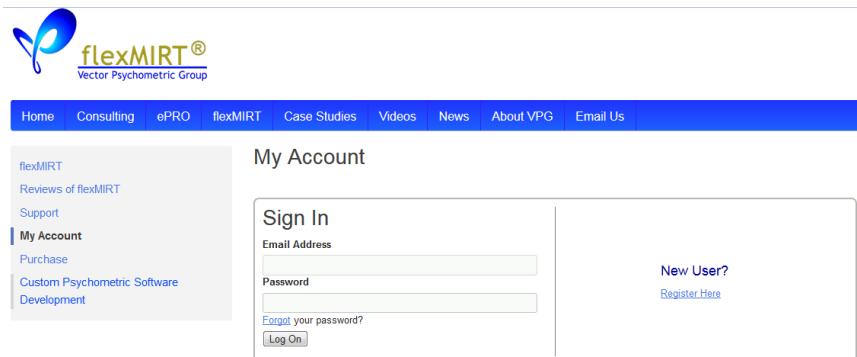

Quick-Start Installation and User Guide

This guide is designed to provide an overview for installing flexMIRT® from the webpage and initializing the program for use.

1. Installing flexMIRT

To obtain the flexMIRT® installer, you must first register for an account on the flexMIRT® website. The registration page may be found by selecting the My Account link in the flexMIRT® website banner or visited directly at <http://www.vpgcentral.com/irt-software/account>. From your account page, you will be able change your password, view your current flexMIRT® license and expiration date information, manage licenses on your various computers (with a purchased academic license users are allowed up to 3 separate installs of the program), as well as make payments for new or renewed licenses.



The screenshot shows the flexMIRT website's navigation bar and a 'My Account' sign-in form. The navigation bar includes links for Home, Consulting, ePRO, flexMIRT, Case Studies, Videos, News, About VPG, and Email Us. The 'flexMIRT' logo is at the top left. On the left, a sidebar menu lists flexMIRT, Reviews of flexMIRT, Support, My Account (which is selected and highlighted in blue), Purchase, and Custom Psychometric Software Development. The main content area is titled 'My Account' and contains a 'Sign In' form with fields for Email Address and Password, and links for 'Forgot your password?' and 'Log On'. To the right of the sign-in form, there is a 'New User?' section with a 'Register Here' link.

After selecting Register Here, you will be taken to the registration page and asked to enter your name, email address, and any affiliation information you would like to supply.



flexMIRT®
Vector Psychometric Group

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flexMIRT
Reviews of flexMIRT
Support
My Account
Purchase
Custom Psychometric Software Development

Create a New Account

Name: Jane Doe
Email address (You will use this to verify your account and login): janedoe@email.com
Institution: Any Company, Inc.
Department: Psychometrics

Register Cancel

Once you have submitted this information via the Register button, an email confirming your registration information (including the initial password for your flexMIRT® account) will be sent to the address you provided. The confirmation email will originate from info@flexmirt.com - please add this email address to your safe list and, if you have not received an email after 10 minutes, check that the email has not been redirected to your spam folder.

With the password obtained from the email, you may now log in to your flexMIRT® account. You may change your password using the Change Password link in the upper right hand corner. Before you are able to download the installer, you must accept the license agreement, which can be accessed by clicking the link in the License Options section of the page.

The screenshot shows the flexMIRT website's account management interface. At the top, there is a navigation bar with links for Home, Consulting, ePRO, flexMIRT, Case Studies, Videos, News, About VPG, and Email Us. On the far right of the header are links for Change Password and Log Off. Below the header, there are two main sections: 'Linked Accounts' and 'License Options'. The 'License Options' section contains a message about a new license agreement that must be signed before download or purchase. It includes a link to agree to the new license. To the left of these sections is a sidebar with links for flexMIRT, Reviews of flexMIRT, Support, My Account (which is currently selected), Purchase, and Custom Psychometric Software Development. Below the sidebar are two more sections: 'Account Details' (showing janedoe@email.com and Jane Doe, Any Company, Inc. - Psychometrics) and 'Payment History' (a table with columns for Date, Amount, and Status). A 'Master License Details' section on the right displays the Master License ID (b156f5aa-be3e-4f20-a0bf-617b74178478), License Status (NewEUA), and Expiration Date (7/7/2015). It also notes that the license does not automatically renew and provides a contact link for pricing information. The bottom of the page has a footer with a copyright notice for Vector Psychometric Group, Inc. and a link to the Terms of Use.

You will be taken to the End User License Agreement. Once you have reviewed the agreement, there is an "I Agree" check box at the bottom of the page which you must endorse to continue. After you have accepted the license agreement, you will be able to access the flexMIRT® installer via the newly available Download Software link on the left side of the screen, in the Account Details box.



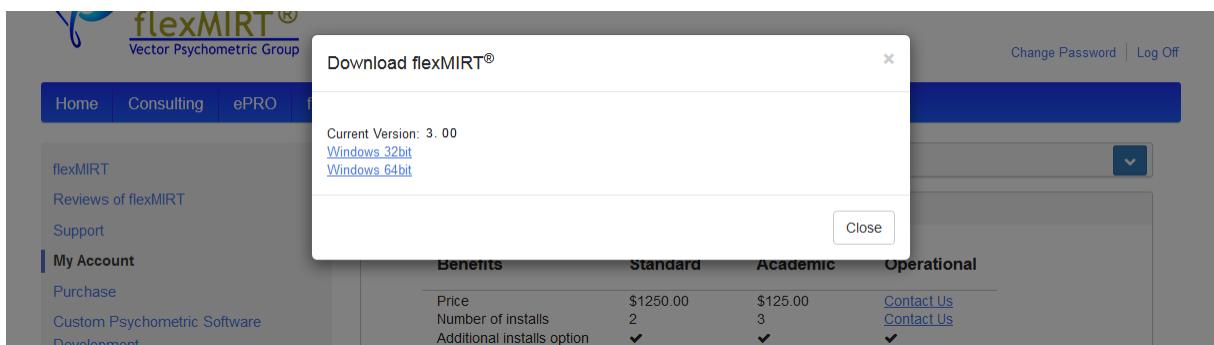
The screenshot shows the flexMIRT account management interface. At the top right are 'Change Password' and 'Log Off' links. Below is a navigation bar with links: Home, Consulting, ePRO, flexMIRT, Case Studies, Videos, News, About VPG, and Email Us. The main content area has several sections:

- Linked Accounts:** A dropdown menu showing 'flexMIRT'.
- License Options:** A table comparing benefits across Standard, Academic, and Operational categories.

Benefits	Standard	Academic	Operational
Price	\$1250.00	\$125.00	Contact Us
Number of installs	2	3	Contact Us
Additional installs option	✓	✓	✓
Multi-User option	✓	✓	✓
Research Use	✓	✓	✓
Operational Use			✓
Educational Discount		✓	
Classroom Discount		Contact Us	

 Two 'Purchase' buttons are visible below the table.
- Account Details:** Shows 'jandedoe@email.com' and 'Jane Doe, Any Company, Inc. - Psychometrics'. A 'Download Software' button is present.
- Payment History:** A table with columns Date, Amount, and Status, showing one entry: 'Date: 7/7/2015, Amount: \$1250.00, Status: Pending'.
- Master License Details:** Displays 'Master License ID: b166f5aa-be3e-4f20-a0bf-617b74178478', 'License Status: Pending', and 'Expiration Date: 7/7/2015'. It notes that the license does not automatically renew and provides a contact link for pricing information. A table for 'Child License' details is shown but empty.

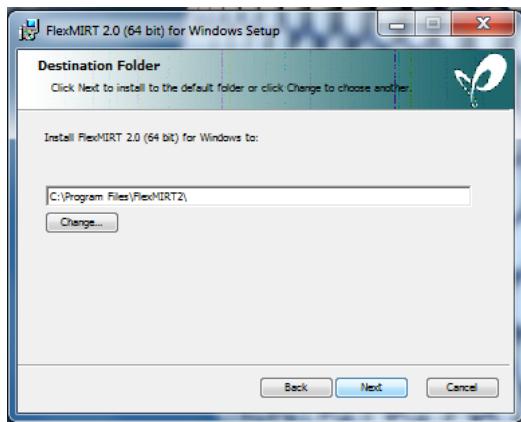
After selecting Download Software, a pop-up will appear where you will select the version of flexMIRT® appropriate for your computer. The flexMIRT® installer should be saved to a folder where you will be able to locate it later.



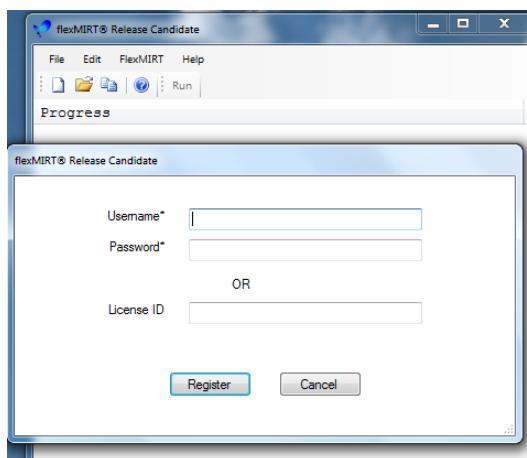
Locate the downloaded installer (flexmirtInstaller) and double-click to activate it. NOTE: IT MAY BE NECESSARY FOR SOME USERS, ESPECIALLY THOSE WITHOUT ADMINISTRATIVE PRIVILEGES, TO RIGHT-CLICK ON THE INSTALLER AND SELECT “Run as Administrator” FOR THE PROGRAM TO FUNCTION PROPERLY ONCE IT HAS BEEN INSTALLED. Click “Next” to begin the flexMIRT® installation process.



The second step of the installer will ask which folder you wish to install the program into. If you would like the program installed somewhere other than the default location, this can be accomplished by selecting the “Change” button and directing the installer to the desired folder location.



Follow the remaining steps, as directed by the installer, until the program indicates that it has finished installing. Once flexMIRT® have been installed, a shortcut will appear on the desktop. Double-click this to initiate the program. On the first start-up flexMIRT® will open a pane where you must register the software; if you opt to cancel at this point you will receive a warning message and flexMIRT® will completely shut down. You may either supply the flexMIRT® account username and password you set up earlier or may copy the license code from your My Account webpage into the appropriate box.

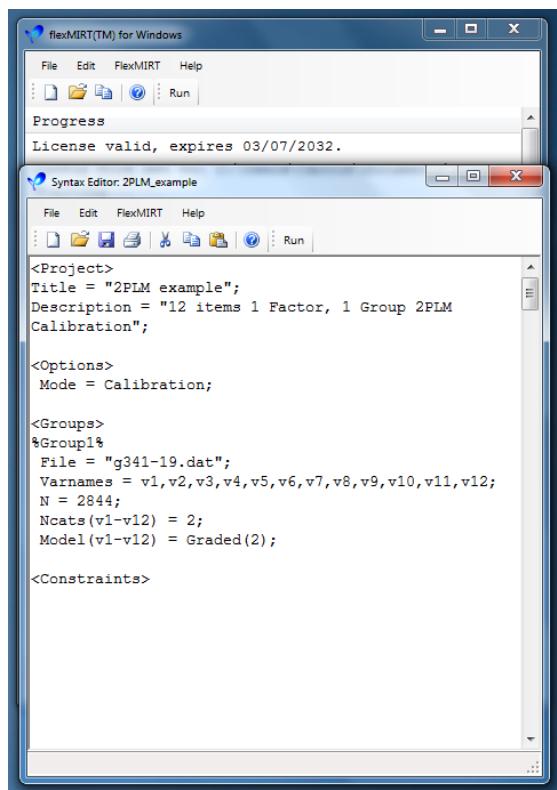


2. Using flexMIRT

With the software registered, you are now able to conduct analyses. The flexMIRT® Support page (<http://www.vpgcentral.com/irt-software/support/>) has the User's Manual and numerous example syntax command files with accompanying datasets, to help you become acquainted with the types of analyses that may be conducted and how command files should be structured. By selecting "New" under "File" or using the "New" icon, a command file containing necessary statements for a basic analysis opens. Once you have modified this command file, it must be saved prior to being able to submit the analysis to flexMIRT®; the "Run" button is disabled until the file has been saved to prevent the example code from being over-written.

To provide a brief tutorial, we will focus on the first example, found in the folder Example 2-1. Existing files are opened using the Open command under the File option of the engine viewing pane, which is the pane opened when the program is first initiated. Once the desired flexMIRT® command file is located and selected, it will be opened in a separate pane, labeled Syntax Editor: with the file name listed after.

The command file is submitted for analyses by clicking the "Run" button on the far right of the icon toolbar. flexMIRT® will print its progress (e.g., EM iteration number, etc.) in the engine pane and, when complete, will open the Output Viewer pane, which will contain all results. Additionally, the results are written to an external text file, which may be opened at a later time with flexMIRT® or a text editor such as Notepad.



Output Viewer : 2PLM_example - 05:04:44

2PLM_example.it

```
flexMIRT(R) Engine Version 3.00 (64-bit)
Flexible Multilevel Multidimensional Item Response
Modeling and Test Scoring
(C) 2013-2015 Vector Psychometric Group, LLC.,
Chapel Hill, NC, USA

2PLM example
12 items 1 Factor, 1 Group 2PLM Calibration

Summary of the Data and Dimensions
  Missing data code      -9
  Number of Items        12
  Number of Cases        2844
  # Latent Dimensions    1

  Item  Categories      Model
    1            2      Graded
    2            2      Graded
    3            2      Graded
    4            2      Graded
    5            2      Graded
    6            2      Graded
    7            2      Graded
    8            2      Graded
    9            2      Graded
   10            2      Graded
   11            2      Graded
   12            2      Graded

Bock-Aitkin EM Algorithm Control Values
Maximum number of cycles: 500
Convergence criterion: 1.00e-004
```