

EViews 7 Getting Started

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Table of Contents

GETTING STARTED	1
Installing EViews	1
Registering EViews	2
What is Registration?	2
How Do I Register?	3
Frequently Asked Questions about Registration	7
Updating Your Copy of EViews	8
WHAT'S NEW IN EViews 7	11
Overview	11
Performance	14
General EViews Interface	14
Data Handling	17
Graphs	19
Programming Support	21
External Interfaces	23
Econometrics and Statistics	23
Compatibility Notes	28

Getting Started

Congratulations on your purchase of EViews 7, the premier forecasting and analysis package for Windows-based computers. This guide will lead you step-by-step through the installation and registration procedure for EViews 7.

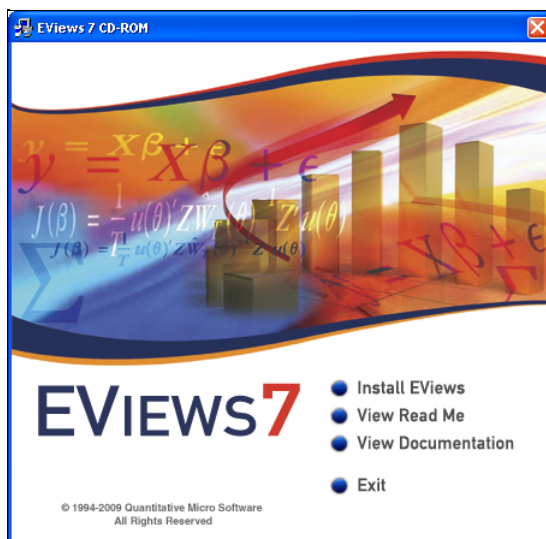
(The following discussion describes the installation and registration process for single user copies of EViews and seat licenses purchased under a Volume License Program. Setting up machines to use concurrent use licenses will require a different procedure; for details, please check with your IT support department.)

Installing EViews

Your copy of EViews 7 is distributed on a single CD-ROM. The installation of the software and supporting files is straightforward—first close all other applications, then insert the CD into your computer's drive and wait briefly while the disc spins up and the setup program launches. If the CD does not spin-up on its own, navigate to the CD drive using Windows Explorer, then double-click on the Setup icon ("Autorun.EXE").

When the installer opens, the EViews 7 installation screen is displayed, offering several options for how to proceed. You may close this window at any time by clicking on the **Exit** button, by clicking on the **Close Window** box in the upper right-hand corner of the window, or by double clicking on the icon to the left of "EViews 7 CD-ROM" in the title bar.

You should first click on **View Read Me** to view any last minute changes in the installation or operating instructions. Once you have done so, you are ready to perform the installation of the EViews software and documentation.



To start the installation process, click on **Install EViews** and follow the instructions. You will be prompted to read and accept the License Agreement, and to designate a directory into

which you wish to install your copy of EViews. By default, EViews will install into “\Program Files\EViews7” (“\Program Files (x86)\EViews7” on a 64-bit Windows system). If you wish to change the installation directory, click on **Browse** and navigate to the desired directory. Click on **Next** to continue.

Next, you will be asked to enter a name and serial number. Single user license holders will find the 24-character serial number on the back of the CD-ROM case. Those of you who have obtained your copy of EViews as part of a Volume License agreement should obtain a serial number from your license administrator. Enter the serial number and your name as you wish it to appear in your copy of EViews, and click on **Next**.

In the next screen, select the components you wish to install and click on **Next**. Lastly, you will be asked about setting up a **Start Menu** folder containing shortcuts for running EViews. Clicking on **Next** starts the actual installation.

You should note that as part of the installation procedure, EViews will prompt you to register files with the extensions .WF1, .PRG, and .EDB. If these extensions are already registered, possibly by an earlier version of EViews, you will be prompted to allow EViews 7 to override the existing registration. Registering the extensions will allow you to double-click on files with these extensions to launch EViews 7.

Finally, EViews will also ask you whether you wish to create shortcuts to the EViews example files folder and the EViews program executable.

Once the installation procedure is completed, click on **Finish**. The EViews Start Menu folder will open. To launch EViews, double-click on the EViews 7 icon. Subsequently, you may launch EViews using the shortcut on your desktop, if present, or by selecting EViews from the Windows Start Menu.

Registering EViews

What is Registration?

To use EViews 7 on a specific computer, you must first register the program using the serial number printed on your CD-ROM case or obtained from your license administrator. EViews registration is the one-time process of assigning a serial number to a specific machine, sending a unique machine ID number to QMS, and writing some information to your Windows registry. This is a simple process that can be performed in a few seconds.

The first time EViews is run on a new machine, you will be prompted to register the machine. You may choose to do so immediately, or you can put off registration to a later date, but you must register the machine within 30 days of installation. If you delay registration, you will be prompted to register the machine every time you launch EViews. After 30 days, an unregistered copy of EViews will no longer run.

The EViews single user and standalone licenses allow for a single individual to have exclusive use of copies of EViews residing on multiple machines, or for multiple users to have exclusive access to a copy of EViews residing on a single machine. For example, a single user may install and register EViews on his or her office computer, home computer and a laptop computer, provided that the use of EViews is exclusive. Note, specifically, that the license terms do not allow two users to share copies of the same license of EViews residing on two machines.

To facilitate the legitimate use of EViews on multiple machines, we allow each EViews single user serial number (one beginning with “70A”) or standalone serial number (one beginning with “70S”) to be used in registering up to three machines. If you have exceptional circumstances which require registration on additional machines, please contact our office.

Under the terms of the EViews Volume License agreement, “70C” (volume) license serial numbers may not be used to register multiple machines. Each volume licensed machine running EViews must be assigned a distinct serial number. Thus, licensing an office computer, home computer and laptop computer of a single user will require three distinct Volume License serial numbers.

Once registered on a given machine, EViews 7 will run indefinitely. The copy of EViews may be uninstalled and reinstalled on a registered machine, updated, or moved to a different directory without reregistering the copy for that machine. In the special case where a machine’s hard disk is wiped clean, but no other changes are made to the system, you may simply reregister your copy of EViews. Note that in this circumstance, reregistration on the machine will *not* count as an additional registration.

If an entire machine or a machine’s hard disk is replaced, you should contact our office to unregister your previous installation prior to reregistering.

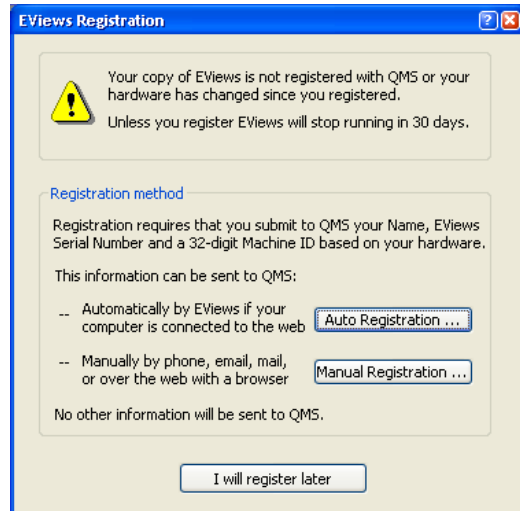
How Do I Register?

Before starting the registration process, you should first locate the EViews serial number that is attached to the case of your EViews CD-ROM or provided by your Volume License administrator. You must enter this number into EViews during the registration procedure.

Next, you should launch EViews by double-clicking on the EViews icon or by selecting EViews from the Windows Start Menu.

If the copy of EViews is not registered, EViews will display a warning dialog. The dialog will inform you that EViews is not registered for this machine and will indicate the number of additional days the unregistered copy will continue to run.

You may proceed in three different ways. First, you can choose to delay software registration by clicking on the **I will register later** button. If you select this option and the grace period has not expired, EViews will close the dialog and will operate in the usual fashion. In this way you can use your unregistered copy of EViews as though it were fully registered. However, if the grace period has expired, your copy of EViews will not run until it is registered.

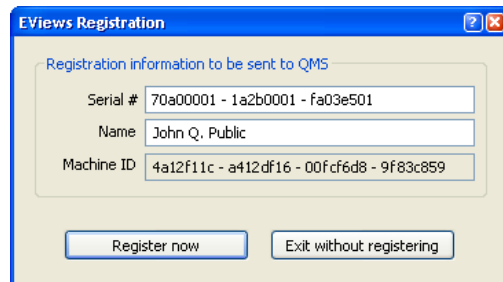


Alternatively, you may choose to register in one of the two remaining ways: you may use the EViews auto registration features (by clicking on **Auto Registration**), or you can manually register (by clicking on **Manual Registration**). Selecting either of the latter two options will open a dialog prompting you for additional information.

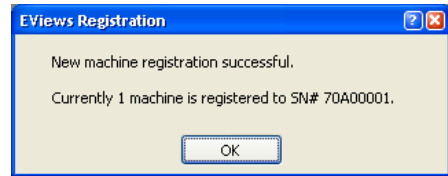
Auto Registration

If your computer is connected to the Internet, auto registration makes registering EViews a snap. Simply click on the **Auto Registration...** button to display a dialog for entering your registration information.

EViews will fill out as many fields in this dialog as possible. If you wish to continue with the auto registration process, make sure that the entries in the **Serial #** and **Name** fields are correct. When you click on the **Register now** button, EViews will attempt to contact one of our registration servers and, if successful, will transmit the information contained in the dialog to the server. The server will process the information and the machine will be registered to run EViews.



You should see a message indicating that registration was completed successfully, along with the number of machines that have been registered to the serial number.



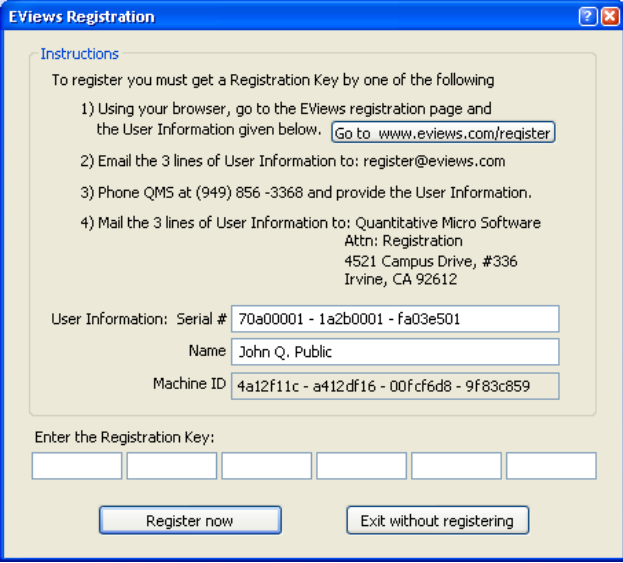
If you do not wish to continue with auto registration, click on the **Exit without registering** button and you will be returned to the main registration screen.

Note that there are some circumstances in which auto registration will fail. Obviously, auto registration will not work if the computer is not connected to the Internet. If registration fails, you should first verify that you have Internet access. Second, your computer may be behind a firewall which does not allow the required communication between your computer and our servers. Furthermore, while unlikely, it is possible that all of our registration servers are temporarily unresponsive.

If you have problems with auto registration, you may wish to try again at a later time. Alternatively, you can choose to register manually as described in the next section. You may, of course, run your copy of EViews on an unregistered machine for up to 30 days from the time of installation.

Manual Registration

If auto registration fails or if you prefer not to use the automatic registration features, you may elect to register manually. From the main registration page, click on **Manual Registration...** to display the manual registration dialog:

The image shows a Windows-style dialog box titled "EViews Registration". It has a blue title bar with standard window controls. The main area has a light beige background. At the top, under the heading "Instructions", it says "To register you must get a Registration Key by one of the following" and lists four methods: 1) Using a browser to go to www.eviews.com/register (with a button labeled "Go to www.eviews.com/register"), 2) Emailing user information to register@eviews.com, 3) Calling QMS at (949) 856-3368, and 4) Mailing user information to Quantitative Micro Software, Attn: Registration, 4521 Campus Drive, #336, Irvine, CA 92612. Below the instructions are three text input fields: "User Information: Serial #" containing "70a00001 - 1a2b0001 - fa03e501", "Name" containing "John Q. Public", and "Machine ID" containing "4a12f11c - a412df16 - 00fcf6d8 - 9f83c859". Below these is a section labeled "Enter the Registration Key:" with six empty text boxes. At the bottom are two buttons: "Register now" and "Exit without registering".

EViews Registration

Instructions

To register you must get a Registration Key by one of the following

- 1) Using your browser, go to the EViews registration page and the User Information given below. [Go to www.eviews.com/register](http://www.eviews.com/register)
- 2) Email the 3 lines of User Information to: register@eviews.com
- 3) Phone QMS at (949) 856 -3368 and provide the User Information.
- 4) Mail the 3 lines of User Information to: Quantitative Micro Software
Attn: Registration
4521 Campus Drive, #336
Irvine, CA 92612

User Information: Serial # 70a00001 - 1a2b0001 - fa03e501

Name John Q. Public

Machine ID 4a12f11c - a412df16 - 00fcf6d8 - 9f83c859

Enter the Registration Key:

You must fill in three fields in the dialog: the 24-character serial number, your name, and a 36-character registration key (which you must first obtain).

As described in the dialog instructions, there are four ways to acquire the registration key: web browser, email, phone, or standard mail.

The easiest method of retrieving the registration key is via web browser. If you have access to a browser on a machine that is connected to the Internet, navigate to

<http://www.eviews.com/register/>

which will direct you to our registration servers. Follow the links to the registration page, and fill in the form. Enter your name, serial number, and the machine ID number as displayed in the registration dialog. Click on the **Submit the form** button. You will be provided with a 36-character registration key.

Once you have obtained the key, return to the registration dialog in EViews. If necessary, select **Help/EViews Registration...** from the EViews main menu to display the registration page.

Make certain that you have entered your name and serial number *exactly* as provided earlier, select the **Key obtained by phone or browser** radio button, and enter the key in the registration key box. Click **OK** to finish the registration process. Note that you should be able to copy-and-paste the registration key information from your browser into the dialog edit fields.

If all of the information is entered correctly, you will be informed that your registration is complete.

If you do not have access to a working web browser, you can contact our office via email, phone, or standard post to obtain the key:

Quantitative Micro Software
Attn: Registration
4521 Campus Drive, #336
Irvine, CA 92612
Email: register@eviews.com
Phone: 949-856-3368

Please provide a registration name, full 24-character serial number, and the machine ID number. We will then provide you with the 36-character registration key.

If you receive the key via email, you should be able to copy-and-paste the key information into the dialog edit fields.

Contact Information

Once registration is completed, EViews will display an optional contact page form. You may submit this form to send name, address, phone number, and email information to QMS. This information is for our records only and will not be redistributed to others.

Frequently Asked Questions about Registration

While the registration procedure should be straightforward, we understand that you may still have questions. The following are answers to the most frequently asked questions:

- *What if my EViews is about to expire and I can't register?*

As is common with other programs which require registration, we provide a 30-day grace period for registering copies of EViews installed on a new machine. Furthermore, each time you run EViews, you will be given the opportunity to register your copy using one of several methods. We do not anticipate that you will have any problems registering your copy of EViews in the allotted time. Please feel free to contact our office if you have any difficulties.

- *I contacted you and received a key, but the key doesn't seem to work. What could be wrong?*

The most common registration problem results from entering a name or serial number which does not match the key. You should make certain that the name and serial number both match those provided when obtaining a key. Note that while the name is not case-sensitive, it should otherwise be entered *exactly* as originally provided. If you still experience problems, do not hesitate to contact our office.

- *My copy of EViews does not appear to have the features for the edition that I purchased. Do you have to send me a new CD-ROM?*

No. Simply contact our office. Once we verify the edition of EViews that you have purchased, you should be able to reregister and upgrade your copy to enable the features.

- *I've replaced my computers and no longer have available registrations. What should I do?*

If there are special circumstances where you need to register an additional machine, please contact our office.

- *How do I change the name in which my copy is registered?*

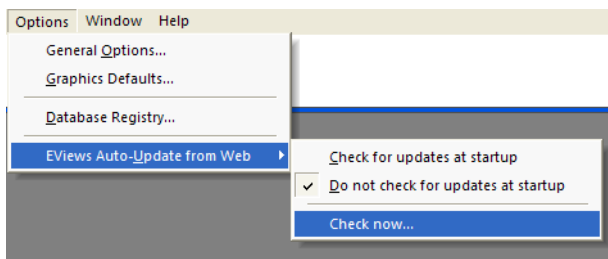
Your copy of EViews contains the name in which it was first registered. If you wish to change the registration name, please contact our office.

- *How do I find my serial number and other information about my copy of EViews?*

Your copy of EViews contains information about your registration status, as well as the product version and build date of the program. To obtain this information, simply select **Help/About EViews** from the main EViews menu.

Updating Your Copy of EViews

EViews 7 offers an automatic updating feature that can check for new updates every day, and install an updated version if available. (The automatic update feature can be enabled or disabled from the **Options/EViews Auto-Update from Web** menu item.) Alternatively, you may manually check for updates from within EViews at any time by selecting **Check now...** under the **EViews Auto-Update from Web** menu item, or by selecting **EViews Update** from the **Help** menu.



You may also visit the EViews website to check for updates to the EViews program and other components (documentation, sample data, and sample programs). Use your browser to go to:

<http://www.eviews.com>

and navigate to the downloads area. Downloading updates *will not* require re-registration of EViews on any previously registered computer. Simply download the update, run the installer, and you will have the latest shipping copy of your software.

Where to Go For Help

The Help System

All of the EViews documentation may be viewed from within EViews using the help system. To access the EViews help system, go to the main menu and select **Help/EViews Help Topics...** or click on **Help/Quick Help Reference** and select a topic to jump directly to relevant subsections.

Note that the Help system may contain updates to the documentation that were made after the manuals went to press.

The EViews Manuals (PDF Files)

Your EViews CD-ROM includes copies of the EViews manuals in Adobe Portable Document Format (.PDF) file format. A copy of Adobe Acrobat Reader is provided so that you may both read and print the documentation. The **Read Me** document on your CD-ROM disc documents the use of the PDF files and Acrobat Reader.

If you elected to include the electronic versions of the manuals in your EViews installation, you may access the PDF files from within EViews by clicking on **Help** in the main EViews menu and selecting the file of interest. Alternately, you may use Windows to navigate to the “Docs” subdirectory of your EViews installation directory to access the files directly.

Note that the electronic versions of the documentation may have been updated with corrections so that the material in the PDF files may differ from the printed manuals.

The EViews Forum

To supplement the information provided in the manuals and the help system, we encourage you to visit the EViews Online Forum, where you can find answers to common questions about installing, using, and getting the most out of EViews. The Forum is an ideal place to ask questions of and share information with other EViews users.

The forum address is:

<http://forums.eviews.com>

What's New in EViews 7

EViews 7 features a wide range of exciting changes and improvements. The following is an overview of the most important new features in Version 7.

(The new features of EViews 7.1 are documented in [“EViews 7.1 Supplement” on page 1](#) of *EViews 7.1 Supplement*.)

Performance

Computational Tune-up

As part of a general effort to improve performance, a variety of key computational routines and algorithms have been scrutinized and tuned for optimal performance. The result is that most statistical computations in EViews are now significantly faster. You should particularly notice the difference in formerly long-running routines, most notably in iterative or other complex procedures.

Multi-Processor Support

EViews now offers support for up to eight multiple processors or cores, allowing you to perform multi-threaded calculations in settings where threading would improve performance. By default, EViews will automatically analyze your calculations and the number of processors available, and determine how to optimally break up your problem into parts that may be computed in their own threads.

- See [“Multi-Processor Use” on page 635](#) of the *User's Guide I*.

General EViews Interface

The general EViews interface has been improved in a number of ways. The following are the highlights.

Customizable Appearance

You may customize the appearance of your EViews environment to use different colors for windows, backgrounds, toolbars, and status bars.

- See [“Window Appearance” on page 621](#) in *User's Guide I*.

Drag-and-Drop

Drag-and-drop support has been enhanced in EViews 7. You may now copy objects between workfiles and pages using drag-and-drop. You can even use drag-and-drop to copy entire workfile pages and to retrieve objects from an EViews database.

For example, you may:

- Create a new workfile page and copy the contents of an existing workfile page or foreign source file by dragging the source file or tab and dropping it over the **New Page** tab in a workfile. A plus (“+”) sign will appear when your cursor is over an appropriate area. See [“Creating a Page by Loading a Workfile or Data Source” on page 63](#) in *User's Guide I*.

Alternately, drag the workfile page tab into the open area in the EViews window; a new workfile will be created, and the contents of the source page will be copied into the first page of the new workfile.

- Reorder workfile pages within a workfile by dragging a page tab and dropping it over the tab of the page you would like it to follow. See [“Reordering Workfile Pages” on page 65](#) in *User's Guide I*.
- Combine the contents of two pages by dragging the source page tab onto the destination page window. Depending on the objects being copied and the frequencies of the workfiles, you may receive a series of prompts to assist in completing the paste properly.
- To copy a set of EViews objects from within a page, select them and drag them where you'd like them to go. The destination object, whether it be a workfile, group, program, model, or the command window, will attempt to accept the paste of the objects. A plus (“+”) sign will appear when your cursor is over an appropriate area. Depending on the objects being copied, you may receive a series of prompts to complete the paste.
- There are a variety of ways in which EViews objects may be dropped onto other objects. You may add a series to a group either by dragging the series icon onto the **Spreadsheet** view of the group or by dragging it onto the **Group Members** view of the group. To add an equation to a model, drag the equation icon from the workfile into the equation view of the model.

It is best to experiment with drag-and-drop to discover all of the options now available in EViews 7. As you drag and hold your mouse over a target object, you should see a plus (“+”) sign when a drop operation is possible, and a circle with a line through it when dropping is not allowed.

Note that drag-and-drop using the left mouse button mimics the copy-and-paste operation. To perform a **Paste Special** where available, drag the objects with the right mouse button.

Implementation of drag-and-drop means that the old selection method of clicking on an icon and dragging to select will no longer work, since clicking on the object's name or icon will initiate drag-and-drop instead of selection. The click-and-drag form of selection may still be performed by clicking on the white space next to an object's name and then dragging.

Improved Command Window

In EViews 7, the command window has been improved to provide improved access to previously executed commands for quick editing and/or re-execution, and to allow for undocking, resizing, and dragging to anywhere inside the EViews frame.

- See [“The Command Window” on page 7](#) in *User’s Guide I*.

Updated Graph Dialog Interface

The graph object and global graph options dialogs have both been completely redesigned in EViews 7.

- See [“Graph Options,” beginning on page 567](#) and [“Graphics Defaults,” beginning on page 636](#) of *User’s Guide I* for a brief discussion of the graph and global options dialogs.

Updated Global Options Interface

The various global options dialogs have been consolidated into a single **General Options** dialog, featuring an easy-to-use tree structure so you may navigate quickly between sets of settings.

- See [“General Options,” beginning on page 621](#) of *User’s Guide I*.

In addition to reorganizing the existing material, there are important new settings that may be found in this dialog:

- Under the first group, **Windows**, you will find an **Appearance** dialog that you may use to set various EViews color palettes using themes. See [“Window Appearance” on page 621](#) in *User’s Guide I*.
- **Advanced system options** offers control over multi-processor use. You may elect to use up to eight threads in statistical calculations. See [“Multi-Processor Use” on page 635](#) of the *User’s Guide I*.
- **Runtime settings**, under the **Programs** group, offers global settings for the new program log messages ([“Program Message Logging” on page 18](#)) that allow you to control which messages are output to the log window.

EViews Auto-Update from Web

EViews 7 includes an automatic updating feature that can check for and install any application updates that may be available.

- See [“EViews Updates” on page 11](#) of the *User’s Guide I*.

Data Handling

EViews 7 offers a variety of new features for working with data.

New Workfile Frequencies

EViews 7 offers built-in support for high-frequency (intraday) data, allowing for hours, minutes, and seconds frequencies. In addition, there are a number of new workfile frequencies, including Multi-year, Bimonthly, Fortnight, Ten-Day, and Daily with an arbitrary range of days of the week.

- See [“Creating a Workfile by Describing its Structure” on page 35](#) of *User's Guide I* for details on creating a high-frequency workfile.
- [“Special Date Functions” on page 100](#) of the *Command and Programming Reference* describes the new functions (`@HOUR`, `@MINUTE`, `@SECOND`, and `@HOURF`) for returning intraday information for each observation in the workfile. [“Samples for Intraday data” on page 95](#) of *User's Guide I* documents the use of these functions for setting samples.
- The `wfcreate` (p. 357) and `pagecreate` (p. 293) commands in the *Command and Programming Reference* have been expanded to support subperiod options for setting the days of the week and times of day within the frequency.
- The `smp1` (p. 332) command in the *Command and Programming Reference* has been updated to support use of the new functions: `@HOUR`, `@MINUTE`, `@SECOND`, and `@HOURF`.

Strings

Strings and string processing assume a newly prominent role in EViews 7. Central to this importance are the introduction of the concept of string lists, an expanded library of string functions that includes routines for string list processing, new objects for holding strings (string and svector), and enhanced programming support for working with strings.

- The string object and string vector are new EViews objects for working with strings. See [“String Objects” on page 80](#) and [“String Vectors” on page 80](#) of the *Command and Programming Reference*. String lists are documented in [“String Lists” on page 69](#) of the *Command and Programming Reference*.
- EViews 7 offers a number of new functions for working with string lists. Functions that treat a string as a string list begin with a “w”. Some of the original string functions have corresponding list functions with the same name, proceeded by a “w”. For instance, the existing function `@left` returns the left-most *characters* of a string, while `@wleft` returns the left-most *elements* of a string list.

In addition, there are new functions that operate on or return an svector (string vector) object, and new functions that report information about objects in the current

workfile or database, or a directory on your computer, in a form suitable for string list processing.

See [“String Functions” on page 70](#) and [“String Function Summary” on page 451](#) of the *Command and Programming Reference* for a full list of string functions. See also [“Workfile & Informational Functions” on page 414](#) of the *Command and Programming Reference*.

- EViews objects have new data members which return information about themselves in the form of a string. For lists of the EViews 7 data members, see [Chapter 1. “Object View and Procedure Reference,” on page 2](#) of the *Object Reference*.
- Support for string replacement variables has been enhanced. Prior to EViews 7, you could not employ a string variable which referred to a string variable which would then be replaced. In EViews 7 you may now use recursive string replacement. See [“Replacement Variables” on page 115](#) of the *Command and Programming Reference*.
- String objects and replacement variables may now be used to specify lists for loops. See [“FOR Loops with String Variables and String Objects” on page 130](#) of the *Command and Programming Reference*.
- Previously, strings could only be passed to subroutines through string variables. You may now use string objects and elements of svecors in place of string variables in subroutines. See [“Calling Subroutines” on page 137](#) of the *Command and Programming Reference*.

Direct Support for the FRED Database

FRED® (Federal Reserve Economic Data) is a publicly accessible database of more than 20,000 U.S. time series of multiple frequencies, provided by the Economic Research Division of the Federal Reserve Bank of St. Louis.

- EViews 7 users can now use EViews to connect to, open, query, and import data from the FRED database using the standard EViews database interface. See [“FRED” on page 303](#) of *User’s Guide I* for a brief discussion.
- See [dbopen \(p. 233\)](#) of the *Command and Programming Reference*.

Support for Reading Excel XLSX Files

The Excel 2007 default XLSX format is based on open XML standards. Excel 2007 files are incompatible with older versions of Excel and could not be read by EViews 6.

EViews 7 offers read (but not write) support for XLSX files.

Improved Foreign Data Import

EViews 7 offers a new command for importing data from a foreign file (or previously saved workfile) into an existing workfile. You can, for example, use the `import` command to

merge data from an Excel file into your workfile, or to append data from a SPSS file into an existing workfile.

See [import](#) (p. 267) in the *Command and Programming Reference*.

Documentation on the interactive use of the new import tools is provided in “[Importing Data](#)” on page 5 of the supplemental document “Readme.PDF”.

Expanded Database Capacity

The file format of EViews databases has been modified for version 7 to add support for intraday frequencies and to increase the maximum size of an EViews database from 2GB to 64GB.

As a result, EViews 7 format databases are not compatible with and may not be read by previous versions of EViews.

EViews 7 does offer the ability to save your database objects in a format that may be read by earlier versions by creating an EViews 6 database using the new “type = evIEWS6” option of [dbcreate](#) (p. 231) (in the *Command and Programming Reference*) and then copying objects and data as desired. Some EViews 7 objects and data cannot be stored in a version 6 compatible database. Intraday data, for example, may not be written to an EViews 6 database.

Graphs

Auto-Updating Graphs

The most important graphics improvement in EViews 7 is the addition of *auto-updating graphs*.

Previously, when you created a graph object by freezing an object view, the data in the graph was fixed to the values at the time of creation. You could use EViews tools for customization, many of which were available only for graph objects, to change the look of the graph, but the underlying data could not be changed. Moreover, if the data subsequently changed, you would have to create a new graph by freezing an updated object view and then reapply any customization.

Frozen graph objects may now be linked to the series or group from which they were created. You may determine if and when a frozen graph should update as the sample or its underlying data change. Thus, you may treat a frozen graph as a snapshot of the data at the time it was frozen, as in previous versions of EViews, or allow it to update as data change.

- See “[Freezing a Graph View](#)” on page 558 and “[Graph Updating](#)” on page 581 of the *User's Guide I* for details.
- The [Graph::setupdate](#) (p. 218) and [Graph::update](#) (p. 223) commands (in the *Object Reference*) have been added to support the new graph updating options.

Graph Options Dialog

We have completely redesigned the main **Graph Options** dialog in EViews 7. You will find that most of the options are functionally the same, but they have been broken into smaller categories. Instead of tabs along the top of a dialog, we utilize a descriptive tree structure that runs along the left side of the dialog.

- The majority of the options are described in considerable detail in “[Basic Customization](#),” beginning on page 459 and “[Graph Options](#),” beginning on page 567 of *User’s Guide I*.
- See “[Graphics Defaults](#),” beginning on page 636 of *User’s Guide I* for a brief discussion of the global options dialog.

Observation Info Display

You may now interactively display observation identifiers and values in graph views and graph objects by hovering your cursor over the data point which you wish to identify.

- See “[Quick Start](#)” on page 436 of the *User’s Guide I*.

Date Label Formatting

EViews 7 offers improved control over the formatting of your date labels. In particular, the EViews automatic date formatting setting now allows you to specify a set of guidelines for displaying dates that will be used by EViews when automatically forming labels.

- See “[Date Label Formatting](#)” on page 469 of the *User’s Guide I*.

Date Label Positioning

EViews 7 provides improved control over the positioning of your date labels. Select **Graph Options** dialog and then choose **Axes & Scaling** and **Obs/Date axis** from the tree menu to display the appropriate **Date label positioning** settings.

- See “[Date Label Positioning](#)” on page 471 of the *User’s Guide I*.
- The `Graph::axis` (p. 188) command (in the *Object Reference*), using the `tickauto`, `tickon`, `tickbtw`, and `tickbtwns` options, may be used to control date label positioning.

Date Axis Grid Lines

You may now control the placement of grid lines on the date axis (observation scale) of a graph. Select **Graph Options** dialog and then choose **Axes & Scaling** and **Grid lines** to display the **Obs & Date axis grid lines** settings.

- See “[Grid Lines](#)” on page 472 of the *User’s Guide I*.

- The `Graph::options` (p. 205) command (in the *Object Reference*), with options `gridnone`, `gridauto`, and `gridcust`, may be used to specify the grid options.

Custom Observation Labels

EViews 7 offers two methods for adding custom labels to the date axis, depending on the type or status of the graph and the workfile structure. In particular, you may now instruct EViews to use an alpha or numeric series object to define labels for each observation using the text in the alpha series or numeric values in the series. The labels will be updated as the underlying values in the series change.

- See “Adding Custom Labels” on page 572 of the *User's Guide I*.
- The `Graph::setobslabel` (p. 216) command in the *Object Reference* has been updated to support the extensions to labeling of observations.

Programming Support

Programming in EViews 7 has been improved in a number of important ways.

Program Message Logging

EViews 7 offers log windows that allow you to record the state of objects in your workfile or to follow program progression.

- See “The Run Program Dialog” on page 108 and “Program Log Windows” on page 110 of the *Command and Programming Reference* for discussion.
- The `logmode` (p. 276) command has been added to enable program output logging. See also `logclear` (p. 276), `logmsg` (p. 278), and `logsave` (p. 278) in the *Command and Programming Reference*.

Multi-Line Comments Using Program Editor

EViews 7 provides tools for commenting and uncommenting of blocks of lines in the EViews program file editor.

A block of lines may be commented or uncommented in the editor by highlighting the lines, right-mouse clicking, and selecting **Comment Selection** or **Uncomment Selection**. Alternatively, you may also use CTRL-K to comment and CTRL-U to uncomment lines.

Enhanced Text Objects

Text objects have additional procedures and data members that should make them more useful.

- See “Text Data Members” on page 624 in the *Object Reference*.

- The Text object has a new `Text::clear` (p. 626) and a `Text::append` (p. 625) proc which are documented in the *Object Reference*.

Program Syntax

There have been a number of extensions to the programming language syntax to support the increased prominence of strings in EViews 7.

Recursive Replacement of Strings

- String replacement variables may now be used recursively. See “[Replacement Variables](#)” on page 115 of the *Command and Programming Reference*.

Scalar and String Objects in FOR Loops

Previously, EViews allowed you to use control variables and string variables in defining FOR loops. You could not, however, use scalar objects in defining a loop. EViews 7 extends the FOR loop syntax to allow use of scalar and string objects.

- See “[The FOR Loop](#)” on page 128 of the *Command and Programming Reference*.

String as Subroutine Arguments

Previously, strings could only be passed to subroutines through string variables. String arguments to subroutines may now be defined more generally.

- See “[Calling Subroutines](#)” on page 137 of the *Command and Programming Reference*.

User-Defined Dialogs

EViews 7 offers the ability to construct several types of user-interface controls, or dialogs, within a program. These dialogs can be used to allow users to input variables or set options during the running of the program, and to return information to the users.

- See “[User-Defined Dialogs](#)” on page 142 of the *Command and Programming Reference*.

Object Data Members

EViews 7 offers an expanded set of object data members that provide access to information about the object.

The following new data members belong to every object type in EViews: `@description`, `@displayname`, `@name`, `@remarks`, `@source`, `@type`, `@units`, `@updatetime`.

Each object type may also have a set of new data members specific to that type.

- See the individual object entries in [Chapter 1. “Object View and Procedure Reference,”](#) on page 2 of *Object Reference*.

Information Functions

There are a number of new functions that provide information about your EViews environment.

- There are two new functions for providing file information about a workfile or external directory: `@wlookup` (p. 557) and `@wdir` (p. 556) which are both documented in the *Command and Programming Reference*.

In addition, there are a number of new functions for reporting information about your EViews environment or the active workfile. Among the functions are those for reporting the currently running version of EViews, the name of the current workfile and/or page, and functions for reporting hours, minutes, and seconds for each observation in the current workfile.

- See “General Information” on page 414, “Basic Workfile Functions” on page 416, and “Dated Workfile Information” on page 416 of the *Command and Programming Reference*.

External Interfaces

EViews 7 offers several new methods for interacting with external applications.

The EViews OLEDB driver

External applications may now use OLEDB to read data stored in EViews workfiles (WF1) and EViews databases (EDB). The EViews OLEDB driver provides an easy-to-use interface for external programs to read EViews data.

- See “The OLEDB Driver” on page 114 of the *User's Guide I*.

The EViews Excel Add-in

We have developed an EViews Excel Add-in which offers a simple interface to the EViews OLEDB driver for reading data stored in EViews workfiles and databases from within Microsoft Excel.

- See “The Excel Add-in” on page 113 of the *User's Guide I*.

EViews COM Automation Server

EViews offers COM Automation server support so that external programs or scripts can launch or control EViews, transfer data, and execute EViews commands.

- See “EViews COM Automation Server” on page 152 of the *Command and Programming Reference*.

EViews COM Automation Client Support (MATLAB and R)

EViews offers COM Automation client support application for MATLAB and R servers so that EViews may be used to launch or control the application, transfer data, or execute commands.

- See “[EViews COM Automation Client Support \(MATLAB and R\)](#)” on page 152 of the *Command and Programming Reference*.

Econometrics and Statistics

EViews 7 offers a variety of additions and improvements to its set of econometric and statistical features. The following is a brief outline of the most important new features, followed by additional discussion and pointers to full documentation.

Interpolation

Linear, Log-linear, Catmul-Rom Spline, and Cardinal Spline interpolation are offered as a series procedure. You will find this feature using the **Proc** menu for a series object.

- See “[Interpolate](#)” on page 346 of the *User’s Guide I* and [Series::ipolate](#) (p. 436) in the *Object Reference*.

Whitening

EViews now offers easy-to-use tools for whitening a series or group of series using AR or VAR regressions, respectively. Whitening can be performed with or without a constant and row weights, using a fixed or info-criterion based lag selection. The coefficients of the whitening regression may be saved.

You will find this feature in the **Proc** menu for a series or a group object.

- See “[Make Whitened](#),” on page 431 of the *User’s Guide I*. See also [Series::make-whiten](#) (p. 440) and [Group::makewhiten](#) (p. 257) in the *Object Reference*.

Long-run Covariances

You may now compute estimates of the long-run variance of a series or the long-run covariance matrix of a group of series. You will find this feature in the **View** menu of a series or a group object.

EViews provides powerful, easy-to-use tools for computing, displaying, and saving the long-run covariance (variance) matrix of a single series or all of the series in a group object. You may compute symmetric or one-sided long-run covariances using nonparametric kernel (Newey-West 1987, Andrews 1991), parametric VARHAC (Den Haan and Levin 1997), and prewhitened kernel (Andrews and Monahan 1992) methods. In addition, EViews supports Andrews (1991) and Newey-West (1994) automatic bandwidth selection methods for kernel

estimators, and information criteria based lag length selection methods for VARHAC and prewhitening estimation.

- See “Long-run Covariance,” on page 422 of the *User's Guide I* and [Appendix E. “Long-run Covariance Estimation,”](#) on page 775 of the *User's Guide II*.
- See also [Series::lrvar](#) (p. 438) and [Group::lrcov](#) (p. 252) of the *Object Reference*.

Variance Ratio Test

EViews 7 allows you to perform the Lo and MacKinlay variance ratio test for homoskedastic and heteroskedastic random walks, using the asymptotic normal distribution (Lo and MacKinlay, 1988) or wild bootstrap (Kim, 2006) to evaluate statistical significance. In addition, you may compute the rank, rank-score, or sign-based forms of the test (Wright, 2000), with bootstrap evaluation of significance. EViews also offers Wald and multiple comparison variance ratio tests (Richardson and Smith, 1991; Chow and Denning, 1993), so you may perform joint tests of the variance ratio restriction for several intervals.

You will find this feature using the **View** menu of a series object.

- See “Variance Ratio Test” on page 337 of the *User's Guide I*.
- See also [Series::vratio](#) (p. 467) in the *Object Reference*.

Cointegration Testing

EViews 7 adds support for Engle and Granger (1987) and Phillips and Ouliaris (1990) residual-based tests, Hansen's (1992b) instability test, and Park's (1992) added variables test.

The residual based tests may be computed as a view of a group object, or as a diagnostic view for an equation estimated using one of the cointegrating regression techniques outlined in [Chapter 25. “Cointegrating Regression,”](#) on page 219 of the *User's Guide II*.

The Hansen instability test and Park added variables tests may only be computed as part of the equation view.

- See “Cointegration Test” on page 428 in *User's Guide I* and [Group::coint](#) (p. 229) in the *Object Reference* for discussion of residual-based testing from a group object.
- See “Testing for Cointegration,” on page 234 of the *User's Guide II* and [Equation::coint](#) (p. 52) in the *Object Reference* for details on testing in the equation setting.

Coefficient Covariance Calculation

EViews 7 offers an expanded choice of options for computing standard errors for single equation regression estimates.

An expanded range of HAC covariance options available generally mirror those for the stand-alone covariance calculations documented in [Appendix E. “Long-run Covariance Estimation,” on page 775](#) of the *User’s Guide II*. The new options may be found by selecting **HAC** in the **Coefficient covariance matrix** combo box on the **Options** page of the Equation dialog, and then pressing the **HAC Options** button.

There is now an option to turn off the degrees-of-freedom adjustment to standard errors. This option is available on the main **Options** page of the equation dialog.

- See [“Robust Standard Errors” on page 32](#) of the *User’s Guide II* for discussion.
- See [Equation::gmm \(p. 77\)](#), [Equation::ls \(p. 92\)](#), and [Equation::tsls \(p. 123\)](#) in the *Object Reference*.

Expanded Post-Estimation Diagnostics

EViews 7 offers an expanded selection of post-estimation diagnostics for single equation regression models. All of these new diagnostics can be accessed from the **View** menu of an equation.

Four new coefficient diagnostics are offered:

- Standardized coefficients and coefficient elasticities. See [“Scaled Coefficients” on page 140](#) of the *User’s Guide II* and [Equation::coefscale \(p. 52\)](#) in the *Object Reference*.
- Confidence intervals. See [“Confidence Intervals and Confidence Ellipses” on page 140](#) of the *User’s Guide II* and [Equation::cinterval \(p. 50\)](#) in the *Object Reference*.
- Variance inflation factors. See [“Variance Inflation Factors” on page 143](#) of the *User’s Guide II* and [Equation::varinf \(p. 130\)](#) in the *Object Reference*.
- Coefficient variance decompositions. See [“Coefficient Variance Decomposition” on page 144](#) of the *User’s Guide II* and [Equation::cvardecomp \(p. 64\)](#) in the *Object Reference*.

New stability diagnostics are offered:

- Influence statistics. See [“Influence Statistics,” on page 183](#) of the *User’s Guide II*. See also [Equation::infbetas \(p. 86\)](#) and [Equation::infstats \(p. 87\)](#) in the *Object Reference*.
- Leverage plots. See [“Leverage Plots” on page 182](#) of the *User’s Guide II* and [Equation::lvageplot \(p. 97\)](#) in the *Object Reference*.

A new ARMA diagnostic is provided:

- You may now examine the ARMA frequency spectrum from an estimated single equation. See [“ARMA Frequency Spectrum” on page 108](#) of the *User’s Guide II* and [Equation::arma \(p. 42\)](#) in the *Object Reference*.

Instrumental Variables and GMM Estimation

EViews 7 offers expanded robust standard error options for single equations estimated by least squares (LS) and two-stage least squares (TSLS), and optionally adjusts those standard errors for degrees of freedom. There is also now an option to not include a constant as an instrument in TSLS.

Limited Information Maximum Likelihood (LIML) and K-class estimation are now available as single equation estimation methods. To estimate a LIML or K-class specification, open the **Equation Estimation** dialog and select **LIML - Limited Information Maximum Likelihood and K-class** in the **Method** combo.

Single equation GMM has been completely overhauled. There is an expanded set of options for the HAC weighting matrix, the ability to not include a constant as an instrument, the ability to estimate via continuously updating estimation (CUE), and a host of new standard error options, including Windmeijer standard errors. You may now specify prior observation weights.

You may also save the weighting matrix from estimation and standard error computation, and use a user-supplied weighting matrix in estimation. These features allow the user to estimate a GMM model using the weighting matrix saved from a previous GMM model.

All three estimation methods support new diagnostics and tests, including an Instrument Orthogonality Test, a Regressor Endogeneity Test, a Weak Instrument Test, and a GMM specific breakpoint test. These diagnostics are available from the **View** menu of an equation.

- See [Chapter 20, “Instrumental Variables and GMM,” on page 55](#) of the *User's Guide II* for discussion.
- For updated command syntax, see [Equation::tsls \(p. 123\)](#), [Equation::liml \(p. 90\)](#), and [Equation::gmm \(p. 77\)](#) in the *Object Reference*. The command forms of these estimators are described in [tsls \(p. 346\)](#), [liml \(p. 274\)](#), and [gmm \(p. 257\)](#) in the *Command and Programming Reference*.
- For new diagnostics, see [Equation::orthogtest \(p. 105\)](#), [Equation::weakinst \(p. 131\)](#), and [Equation::breaktest \(p. 46\)](#) in the *Object Reference*.
- See also [“Equation Data Members,” on page 34](#) in the *Object Reference* for a description of new data members.

Cointegrating Regression

EViews 7 offers a full set of tools for estimating and testing single equation cointegrating relationships. Three fully efficient estimation methods, Fully Modified OLS (Phillips and Hansen 1992), Canonical Cointegrating Regression (Park 1992), and Dynamic OLS (Saikkonen 1992, Stock and Watson 1993) are offered, along with several cointegration test-

ing procedures including Engle and Granger (1987) and Phillips and Ouliaris (1990) residual-based tests, Hansen’s (1992b) instability test, and Park’s (1992) added variables test.

To estimate an equation using one of the new cointegrating regression methods, open the **Equation Estimation** dialog, and select **COINTREG - Cointegrating Equation** in the **Method** combo.

- See [Chapter 25. “Cointegrating Regression,”](#) beginning on page 219 of the *User’s Guide II* for discussion.
- See also [Equation::cointreg](#) (p. 56) and [Equation::coint](#) (p. 52). The [Group::coint](#) (p. 229) (in the *Object Reference*) and [coint](#) (p. 203) (in the *Command and Programming Reference*) commands have been updated to support the new group test options.
- See also [“Equation Data Members,”](#) on page 34 in the *Object Reference* for a description of new related data members.

Generalized Linear Models

EViews 7 supports estimation of Generalized Linear Models (Nelder and McCullagh, 1983). This class of models generalizes classical linear regression to include a broad range of specifications that have proven to be useful in practice. Among these models are log-linear regression, standard probit and logit, probit and logit specified by proportions, and regression with count or survival data.

To estimate an equation using GLM, open the **Equation Estimation** dialog, and select **GLM - Generalized Linear Models** in the **Method** combo.

- See [Chapter 27. “Generalized Linear Models,”](#) beginning on page 301 of the *User’s Guide II* for discussion.
- See [Equation::glm](#) (p. 74) in the *Object Reference*. The [glm](#) (p. 253) entry in the *Command and Programming Reference* documents the related estimation command.

Weighted Least Squares

EViews 7 offers new methods of specifying weights for weighted least squares, along with newly added support for observation weighting in GMM specifications

- See [“Weighted Least Squares”](#) on page 36 of the *User’s Guide II* for discussion.
- For updated syntax, see [Equation::ls](#) (p. 92), [Equation::tsls](#) (p. 123), [Equation::gmm](#) (p. 77), [Equation::qreg](#) (p. 108), and [Equation::stepls](#) (p. 119) in the *Object Reference*.
- The command forms of the estimators are documented in [ls](#) (p. 279), [tsls](#) (p. 346), [gmm](#) (p. 257), [qreg](#) (p. 314) and [stepls](#) (p. 338) in the *Command and Programming Reference*.

EViews 7 Compatibility Notes

The following discussion describes EViews 7 compatibility issues for users of earlier versions.

Database Incompatibility

The file format of EViews databases has been modified for version 7 to add support for intraday frequencies and to increase the maximum size of an EViews database from 2GB to 64GB.

As a result, EViews 7 format databases are not compatible with and may not be read by previous versions of EViews.

EViews 7 does offer the ability to save your database in an EViews 6 compatible format using the new “desttype = eviews6” option of [dbcopy](#) (p. 229) (in the *Command and Programming Reference*). Alternately, you may use [dbcreate](#) (p. 231) with the “desttype = eviews6” to create the new EViews 6 format database, and then populate the database with data and objects as desired.

Bear in mind that some EViews 7 objects and data cannot be stored in a version 6 compatible database. Intraday data, for example, may not be written to an EViews 6 database..

Workfile Compatibility

With few exceptions, EViews 7 workfiles are backward compatible with EViews 6. Note that the following objects are new or have been modified in Version 7, so that transporting workfiles that contain these objects back into Version 6 or earlier may result in data loss:

- String objects
- Svector objects
- Equation objects estimated with methods that employ new features (new weighted least squares options, new coefficient covariance options, new instrumental variables options, equations estimated using GMM, LIML, nonstationary regression, or GLM).

If you have saved workfiles containing any of the above objects and open them in EViews 6 or earlier, EViews will delete the incompatible object and notify you that one or more objects were not read. If you then save the workfile, you will lose the objects. We recommend that you make a copy of any workfiles that contain these objects if you would like to use these workfiles in earlier versions of EViews.

In addition, some workfiles and objects that employ EViews 7 features may be read by prior versions, but with loss of features:

- Auto updating graphs, and graphs with custom settings for date label formatting, date positioning, axis grid lines, and observation labels will lose the new features when read by previous versions of EViews.
- If a high-frequency (intraday) data or other new frequency type workfile is opened in an earlier version of EViews, it will be transformed into an unstructured workfile.
- Auto-updating series which use functions that are new to EViews 7 will be read by earlier versions of EViews as ordinary series or alpha objects with fixed values.

Specific Compatibility Notes

Resampling

Previously, the series and group resample procedures were not panel workfile aware so that sampling was performed across cross-sections. The EViews 7 default behavior is for resampled observations for a given cross-section to be taken only from that cross-section. EViews 7 offers an option that allows you to perform resampling across cross-sections.

Seasonal Adjustment

The EViews X12-ARIMA procedure has been updated to use a newer version of the X-12 engine from the Census Bureau.

Release notes for X-12-ARIMA Version 0.3 are, as of this writing, available at:

<http://www.census.gov/ts/x12a/v03/ReleaseNotesVersion03.pdf>

Single Equation Least Squares and Two-stage Least Squares

EViews 7 offers a number of estimation options for LS and TSLS that are not supported in previous versions. Notably, observation weights may be specified in alternative forms, coefficient covariances may be computed without degree-of-freedom corrections, Newey-West coefficient covariance may be computed using a number of new settings, and TSLS estimators may now exclude the constant term from the instrument list. An equation estimated in EViews 7 using the new options is incompatible with and cannot be read by earlier versions of EViews.

The estimation output for Newey-West standard errors has been changed to report the “bandwidth” in place of the “lag truncation” parameter reported previously. The reported bandwidths will be one greater than the corresponding lag truncation values.

Note that EViews 7 offers a number of new diagnostics for TSLS estimation. These diagnostics will not be available unless the equation is estimated using EViews 7. You may click on the **Estimate** button of an existing equation to re-estimate using the original specification.

Single Equation Nonlinear ARMA

We have improved the estimation algorithm used for estimating ARMA models specified by expression; notably, nonlinear ARMA estimation appears to be better behaved in EViews 7 with better convergence properties and fewer “failure to improve” results. One consequence of this change is that in ill-behaved models, EViews 7 results may differ from those obtained using previous versions.

Single Equation GMM Estimation

EViews 7 provides several new diagnostics for GMM estimation. These diagnostics are not available unless the equation is estimated using EViews 7. You may click on the **Estimate** button of a previously estimated equation to re-estimate using the original specification. Note that to obtain identical estimation results, you may have to change estimation settings as described in the remainder of this section.

The default settings for single equation GMM estimation have changed substantively in EViews 7. Consequently, the default EViews 7 GMM estimation may produce quite different results than were obtained in earlier versions. Differences in results are primarily due to changes in the default settings for weight iteration, Newey-West HAC calculation, degree-of-freedom adjustments, and if relevant, the method used for prewhitening.

Weight Iteration

In EViews 6, single equation GMM estimation was performed by iterating both the weighting matrix and coefficient estimates to convergence. By default, EViews 7 only performs a single weighting matrix iteration. EViews 7 does offer an option to iterate the weights to convergence.

Newey-West HAC Calculation

Newey-West HAC calculations differ between EViews 6 and 7 in a number of ways:

- The default EViews 7 Newey-West automatic bandwidths are real-valued while their EViews 6 counterparts are strictly integer valued. EViews 7 offers an option that allows you to use the corresponding integer value.
- The automatic bandwidth selection routines have been improved in EViews 7 and may produce different optimal bandwidth results.
- EViews 7 equations which employ user-specified or Newey-West fixed bandwidths will produce results that differ from those in earlier versions.

The differences result from the fact that the interpretation of a user-specified or Newey-West fixed bandwidth has been rationalized in EViews 7. Previously, a fixed bandwidth was interpreted inconsistently, sometimes acting as a lag truncation value and other times acting as one less than the bandwidth.

To avoid confusion, all references to fixed bandwidths in EViews 7 now refer to the actual bandwidth used in HAC computation. The number of lag truncation terms will then depend on the bandwidth and kernel choice in a more natural fashion.

Despite the fact that various bandwidth settings have changed considerably, it is generally possible to obtain results in EViews 7 that are identical to those in EViews 6 by specifying an appropriate user-specified bandwidth:

- To match an EViews 6 result that employs a Newey-West fixed, Newey-West automatic, or user-specified bandwidth, you should provide an EViews 7 user-specified bandwidth that is *one greater than* the value reported in the EViews 6 output.
- To match an EViews 6 result that employs an Andrews automatic bandwidth, you should provide an EViews 7 user-specified value that is *equal to* the EViews 6 reported value.

Degree-of-Freedom Adjustment

By default, EViews 7 performs a degree-of-freedom adjustment to the coefficient covariance estimates which was not performed in EViews 6. EViews 7 offers an option to not perform the adjustment.

(It is worth noting that the EViews 7 default adjustment setting aligns the single equation GMM estimator with the LS and TSLS single equation estimators, but differs from the behavior in system estimation.)

Prewhitening

The method of prewhitening has been modified to more closely correspond to the methods described in the literature. Previously, prewhitening was performed using a set of univariate AR equations. EViews 7 prewhitens the data using a VAR.

Output

The inconsistent handling of bandwidths in previous versions of EViews was reflected in the HAC output for GMM estimation, which, depending on the HAC settings, reported the actual bandwidth, the lag truncation value, or one less than the bandwidth.

The EViews 7 HAC output always reports the actual bandwidth used in computation.

System GMM

System GMM estimates in EViews 7 may differ from those obtained in earlier versions of EViews due to changes in the HAC automatic bandwidth selection routines, the interpretation of fixed bandwidths, and the method of prewhitening (as described above in [“Single Equation GMM Estimation,” beginning on page 28](#)).

Generally speaking, you may specify EViews 7 user-specified bandwidths which match those used in EViews 6:

- To match an EViews 6 Newey-West fixed, Newey-West automatic, or user-specified bandwidth, you should provide an EViews 7 user-specified bandwidth that is *one greater than* the value reported in the EViews 6 output.
- To match an EViews 6 Andrews automatic bandwidth, you should provide an EViews 7 user-specified value that is *equal to* the EViews 6 reported value.

In addition, the system GMM output now accurately describes the actual bandwidth used in the HAC calculation.