


SWP⁶
Scientific WorkPlace[®]

SW⁶
Scientific Word[®]

SNB⁶
Scientific Notebook[®]

Getting Started

The
ace.
re in the
From the
our expression
Scientific Notebook, you
computations in your
the phrase you typed in
ok like this:
e x^2 in SWP, enter $\int x^2 dx$
computational engine
insertion point at the end of the
expression $\int x^2 dx$.
Click  to evaluate the expression.

Installation

This software requires Windows XP or above or Mac OS X 10.5 (Intel).

Directions

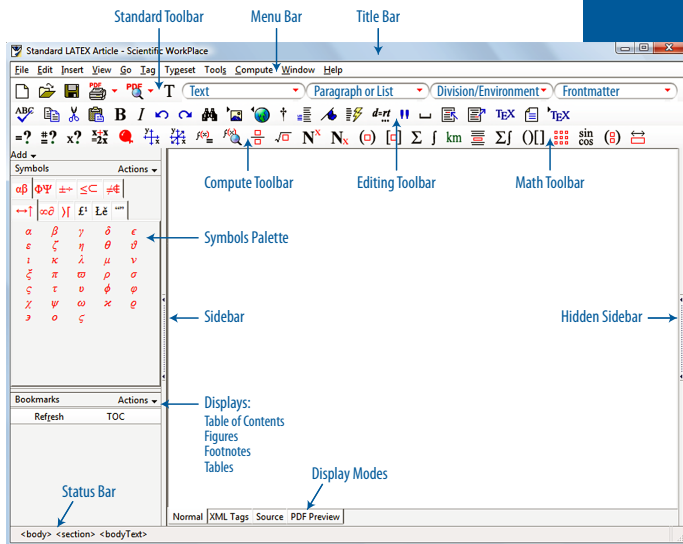
1. Open the set-up program by inserting the program DVD into the DVD drive or clicking on the downloaded file.
2. Follow the directions that appear on the screen.
3. When the installation panel appears, enter the serial number. Continue to follow the instructions on the screen.
4. *If you did not activate the program during installation, the program will not be fully functional. In this case, you will need to activate the product to make it fully functional by running the program, clicking on Help, choosing Activate, and choosing your activation method. Continue to follow the instructions on the screen.*
3. If you need help, our technical support team will be glad to assist you.

Activation system licensed under Patent No. 5,490,216.

Manufactured and printed in the USA by MacKichan Software, Inc., 19307 8th Ave NE, Suite C, Poulosbo, WA 98370. All rights reserved. Scientific WorkPlace, Scientific Word, Scientific Notebook, Scientific Viewer, and Easy Math are registered trademarks of MacKichan Software, Inc. MuPAD is a registered trademark of SciFace Software, GmbH & Co. KG. TeX is a trademark of the American Mathematical Society. Windows is a registered trademark of Microsoft Corporation. Open GL is a registered trademark of SGI. PDF TeX is the copyright of Hàn Thế Thành and is available under the GNU public license. VCam is based on VRS, which is a product developed by Hasso Plattner Institute of the University of Potsdam. Macintosh is a registered trademark of the Apple Corporation. Linux is a registered trademark of Linus Torvalds. RLM is a registered trademark of Reprise Software. All other brand and product names are trademarks of their respective companies.

Exploring the Program

On first starting the program, you see a screen with menus, buttons, and toolbars similar to this:



Scientific WorkPlace (SWP), *Scientific Word* (SW), and *Scientific Notebook* (SNB) are intuitive. The program window is your workplace. The toolbar buttons are identical in function to many of the menu commands. Point the mouse at each button to display a tooltip identifying the button and its function. Take a moment to explore the menus, the Standard toolbar, the Compute toolbar, the Math toolbar, and the Symbols Palette.

Remember, not all toolbars appear in all products; *Scientific Word* does not contain the computer

Getting Started

"I'm so glad this software exists. It's so intuitive and user-friendly. This is the software I prayed for to help me write up my physics homework. Thank you, thank you, thank you."

Steve Johnson
Student
SUNY, Albany


Getting Started

algebra engine, and will not display the Compute toolbar. *Scientific Notebook* does not display the Typeset menu.


Opening a Document

Starting the program automatically opens a blank document, which is a *shell*, or *template*, for a typical new document. If you want to produce a similar document, you can begin entering information right away. Our products come with many different kinds of shells that produce both general purpose documents, as well as documents designed to meet the specific publication requirements of various universities and journals. To create some other kind of document, open a new file and choose a different kind of shell from the dialog box options.

To open a new document

1. On the **Standard** toolbar, click , or from the **File** menu, choose **New Document**.
2. From the **Shell Directories** list, choose the kind of document you want.
3. From the **Shell Files** list, choose the shell you want for your document.
4. Choose **OK**.
5. Read whatever comments appear in the shell, then delete them.

To open an existing document

1. On the **Standard** toolbar, click , or from the **File** menu, choose **Open**.
2. Choose the file folder and name of the existing document.
3. Choose **Open**.

Entering Text

Unless you tell it otherwise, the program assumes that everything you type is text.

Text is entered at the insertion point when the Toggle Text/Math button in the **Standard** toolbar shows **T**. Text shows on the screen in *black*.

Mathematics is entered at the position of the insertion point when the Toggle Text/Math button on the **Standard** toolbar shows **M**. On the screen, mathematics appears in *red*.


To enter text

Just start typing to enter text.

To enter special characters

Choose the desired symbol from the **Symbols Palette**, and click on it. The symbol will automatically be placed at the insertion point.

To save

From the **File** menu, choose **Save** or click , or use the standard save shortcut by pressing **Control + s**.

To exit

From the **File** menu, choose **Close** to leave the document without exiting the program.

Choose **Quit** from the **File** menu to close both the document and the program together.

Keyboard conventions

We use standard computer conventions to give keyboard instructions. The names of keys in the instructions match the names on most keyboards. **Ctrl** (Windows) and **Cmd** (Mac) are synonymous, as are **Enter** (Windows) and **Return** (Mac). However, names of keys are always shown in

Getting Started

“Scientific WorkPlace takes TeX and LaTeX to a new level of ease. I could truly focus on content and pure writing rather than typesetting and remembering arcane command sequences. Overall, SWP saved me at least a few months’ work that otherwise would have been consumed on nothing but typesetting chores. Kudos to an extraordinarily powerful and easy to use package. Just wonderful.”

Andy Ilachinski
Center for Naval Analyses

Windows format.

A plus sign (+) between the names of two keys indicates that you must press the first key and hold it down while you press the second key.

For example, **Ctrl + g** means that you press and hold down the **Ctrl** key, press **g**, and then release both keys.

To terminate lists, subsections, etc., press **Enter** in an empty paragraph to terminate any structure and to return to the next level up. (Pressing **Enter** twice does the same.) This means that you cannot ordinarily press **Enter** multiple times to create white space. To create vertical space, either use **Insert > Spacing Objects > Vertical Spaces** OR use **Shift + Enter**.

In any dialog box, click the **OK** button to put changes into effect and dismiss the dialog box. Click the **Cancel** button to dismiss the dialog box without taking any other actions.

Entering and Editing Mathematics

Because the program assumes you are entering text, you must tell it when you want to enter mathematics.

To start mathematics

On the **Standard** toolbar, click **T**, or from the **Insert** menu, choose **Math**. The button will turn to **M**.

To return to text

On the **Standard** toolbar, click **M**, or from the **Insert** menu, choose **Text**. The button will toggle to the **T**, showing that text is active. Typing spaces in mathematics will return you to text mode.

Entering Text and Math

You can use natural mathematical notation to enter an expression. Your mathematics will appear in red on the screen, and the spacing will be controlled by the program. Try the following example to enter text and math together.


1. Type **To integrate** and press the spacebar.
2. Click **T** to change from text to mathematics mode.
3. Type **x**, click **N^x**, type **2**, and press the spacebar.
4. Click **M** to change back to text.
5. Press the spacebar; then type **in SWP, enter** and press the spacebar.
6. Click **J**. Note that the program changes to math automatically because it recognizes that \int is mathematics.
7. Type **x**, click **N^x**, type **2**, press the spacebar, and then type **dx**. You should see this on your screen:

To integrate x^2 in SWP, enter $\int x^2 dx$

Undo

Version 6 has multiple levels of Undo and Redo.

To undo your most recent changes or deletions

On the **Standard** toolbar, click , or from the **Edit** menu, choose **Undo**. **Control** + **z** also calls the **Undo** command.

Formatting with Tags

When using MacKichan products you do the work of creating content, while the program does the work of formatting your document. To the right of the **Standard** toolbar are four blank text fields.

Getting Started

Looking at the labeled screen shot, you will see that these text fields are labeled: Text; Paragraph or List; Division/Environment; and Frontmatter. Click on the down arrow with the cursor in each bar to explore the formatting options these text fields contain.

Tags are collections of formatting and behavior properties that determine the appearance of your document. Some tags tell you what the tagged text is, for example “emphasized.” Some tags tell you the format; for example, “centered,” tells you that the text or math that you entered will be centered on the page.

You can change the screen appearance of your document by changing the tags, or formatting instructions applied to the content.

To format text


1. Type **SWP** or some other text. Highlight the text you have entered.
2. Click the **Text** box.
3. From the list of tag options, choose **bold**. The program changes the selected text to boldface.
4. Place the insertion point anywhere in the text.
5. Click the **Paragraph** box. From the tag options, choose **centered**. Now your text is centered.

Compute

In *Scientific WorkPlace* and *Scientific Notebook*, you can perform complex computations in your document. Go back to the phrase you typed previously. It should look like this:

To integrate x^2 in SWP, enter $\int x^2 dx$

To call the computational engine

1. Place the insertion point within the expression $\int x^2 dx$.
2. Click  to evaluate the expression.

The computational engine performs the integration. Note that a special pointer shows while the computation is in progress, and places the calculated value in your document. It should now look like this:

To integrate x^2 in SWP, enter $\int x^2 dx = \frac{1}{3}x^3$

Print Preview and Print

You may choose to print or preview your document in two ways: *Direct print* paginates your document and displays it as you see it on the screen; *typeset print* uses L^AT_EX to typeset your document. Typeset print is not available for *Scientific Notebook*.

To preview and print a document without typesetting

1. Choose **File > Print Preview > Direct Print Preview**.
2. The dialog lets you choose options, such as orientation, and lets you print the preview.

To print a typeset document

1. Choose **File > Print > PDF Print**.
2. Your document is compiled and the display changes to PDF Preview. You can print the previewed document or save it outside the document directory.

Exporting to the Web

Exporting your *Scientific WorkPlace*, *Scientific Word*, or *Scientific Notebook* documents as web files

Getting Started

provides a way for others to view your documents with any browser that supports MathML, such as Firefox. The web export feature in Version 6 provides a fast way to create accurate HTML versions of your documents.

To export a document as an HTML file

1. Choose **File > Export to Web**.
2. Enter a name for the file and choose other options if desired. Click **OK**.

Keyboard Shortcuts

Various keyboard shortcuts are listed on the Quick Reference Card.

Manuals and Help Files

The manuals, *Creating Documents with Scientific WorkPlace and Scientific Word 6* and *Doing Mathematics with Scientific WorkPlace and Scientific Notebook 6*, are PDF files on the DVD, as are the Help files.

As you continue to explore Version 6, be sure to check out autosubstitution, fragments, and macros.

Our Software Products Bring to Your Workplace...

- ♦ The ease of entering text and mathematics in natural notation
- ♦ Multiple platform capability - Windows and Mac OS X
- ♦ A user-friendly interface that produces L^AT_EX typeset documents in *Scientific WorkPlace* and *Scientific Word*
- ♦ An easy-to-use computer algebra engine that lets you solve, plot, and animate mathematical expressions in *Scientific WorkPlace* and *Scientific Notebook*

The Only Word Processor You Need

Version 6 of *Scientific WorkPlace*, *Scientific Word*, and *Scientific Notebook* can transform the way you work. All of our products share the same easy-to-learn, easy-to-use scientific word processor. You can create mathematical documents easily, combining text and mathematics in a completely integrated environment. Our software allows you to compose and edit complex documents directly on the screen, without having to think in a programming language.

Our approach, known as logical design, separates the creative process of writing from the mechanical process of formatting. You apply tags to text to say what the text is; the software handles the job of formatting it. This leads to a more consistent and attractive document appearance.

Scientific
WorkPlace

Scientific
Word

Scientific
Notebook

Scientific WorkPlace

*The Integration of
L^AT_EX Typesetting and
Computer Algebra*

Scientific WorkPlace 6 makes writing, sharing, and doing mathematics easier than you ever imagined. With the embedded *MuPAD 5* computer algebra engine, *Scientific WorkPlace* provides an integrated working environment.

This Software Thinks Like You Do!

With *Scientific WorkPlace*, you can compose and edit complex documents, compute and solve equations symbolically and numerically, and plot directly on the screen without being forced to think in a programming language. You don't have to learn L^AT_EX, the industry standard for mathematics typesetting, in order to produce typeset documents.

Sharing Your Work Is Easy

You can share documents with colleagues regardless of operating systems since *Scientific WorkPlace 6* runs natively on Windows and Mac OS X. *Scientific WorkPlace* allows you to typeset L^AT_EX files to PDF, fully hyperlinked and with embedded graphics, or to export web pages.

"I have written two texts with Scientific WorkPlace. It is so easy to use that it doesn't interfere with the creative process. I can't imagine writing mathematics without it."

John Kinney
Professor of Mathematics
Emeritus
Rose-Hulman
Institute of Technology

Scientific Word 6 makes writing and sharing mathematical documents easy for those who do not need an embedded computer algebra system. You can choose to print with or without L^AT_EX typesetting, or you can publish on the web. When you typeset, L^AT_EX automatically generates footnotes, indexes, bibliographies, tables of contents, and cross-references.

Scientific Word gives you: cross-platform capability; multiple levels of Undo; an updated program window; and makes changing T_EX formatting easier. Recent advances in T_EX and L^AT_EX, including X_YL_TE_X, are included in Version 6.

Results!

Scientific Word enables both professionals and support staff to produce beautifully typeset text and mathematics, adhering to internationally accepted standards. Stunning books and articles can be produced without the author having to know T_EX or L^AT_EX. The resulting L^AT_EX files can be submitted electronically to many journals. The program includes many document shells that have been designed to meet the typesetting requirements of specific journals and institutions.

Scientific Word

*Makes Typesetting and
Publishing with
L^AT_EX Easier*

Scientific Notebook

Makes Teaching and Learning Mathematics Easier

"You folks are the greatest. I think Scientific Notebook is superior in almost every respect to other programs... A calculus student made me aware of SNB about 2 years ago. I purchased a copy and found it so user-friendly and powerful that I use it exclusively. Anything I can do on my other programs, I can do better and easier using SNB. Thanks for your help and thanks for a great program."

Boone Newson
Retired Engineer

With *Scientific Notebook 6*, you can create attractive documents which combine text, graphics, and mathematics in natural notation. Although simple to use, *Scientific Notebook* is powerful enough to facilitate teaching, communicating, learning, and exploring mathematics.

Scientific Notebook is a powerful mathematical word processor which includes the *MuPAD 5* computer algebra engine. Using the point-and-click interface, the user can compute symbolically or numerically, and plot and animate 2D and 3D graphs.

Scientific Notebook does not produce typeset output, but can use documents created in *Scientific Workplace* and *Scientific Word*.

Share Mathematics over the World Wide Web

Scientific Notebook is the ideal tool for distance learning. With *Scientific Notebook*, you can send mathematical documents containing text, equations, and plots over the Internet. You can easily build an entire website with mathematical content which can be read with any web browser, such as Firefox, that displays MathML.

Which Scientific Product Do You Need?

Do You Write for Publication?

Scientific WorkPlace and *Scientific Word* produce high quality typeset text, and automate tasks needed for writing large and complex documents. Both products will generate tables of contents, indexes, lists of figures, and bibliographies.

Do You Need a Computer Algebra System?

Scientific WorkPlace and *Scientific Notebook* have the *MuPAD* 5 computer algebra system embedded in them. Once an equation or expression is typed, you can evaluate, simplify, factor, or solve it simply by clicking on a menu item. You can also plot functions in 2 and 3 dimensions.

Do You Teach Undergraduates?

Scientific Notebook is used in many computer labs around the world for teaching mathematics. It is ideal for distance learning since *Scientific Notebook* lets you send mathematical documents containing text, equations, and plots over the Internet.

Are You a Student?

If you are writing a dissertation, you will need either *Scientific WorkPlace* or *Scientific Word*.

If you are an undergraduate, *Scientific Notebook* will likely meet your needs.

Summary

Choose *Scientific WorkPlace* if you write for publication and need a computer algebra system.

Choose *Scientific Word* if you write for publication.

Choose *Scientific Notebook* if you write exams or homework and need a computer algebra system.

Our Philosophy

At MacKichan Software, our business is developing solutions to the problems you encounter in writing, exploring, and teaching mathematics, as well as developing and selling software. Because we sell solutions, we know that having dependable customer service and free technical support are critical to our customers.

Knowledgeable, Friendly, and Free

MacKichan Software is committed to a high standard of customer service, as our many repeat customers will affirm. Emails are generally answered in one business day. During business hours our toll-free phone lines connect you directly to our customer service representatives and our technical support team. We are always glad to answer your questions. If you have suggestions, questions, or problems, please contact us.

www.mackichan.com

Our website has detailed information about:

- ◆ Each of our products
- ◆ Free trial version downloads
- ◆ Pricing
- ◆ Ordering
- ◆ International distributors and resellers
- ◆ Technical support issues
- ◆ Examples of how others use our software
- ◆ User Forum

It is easy to place orders through our web store. Most orders ship in one business day.

"Thanks again for the prompt and expert help that you continue to provide users. SWP is an outstanding program that has been a truly invaluable resource that I have used extensively since 1994."

Professor Douglas Cline
Dept. of Physics & Astronomy
University of Rochester

MacKichan Software offers a variety of licensing options. Customers are able to combine various types of licenses to fit their specific needs and situations.

Fixed Licenses

A **fixed** license is tied to one or more computers, and can be used:

1. Either on one computer used by many people, **OR**
2. By one person on his/her personal computers (home, work, and laptop), and on any combination of platforms (Windows and Mac).

These two cases are mutually exclusive.

Floating Licenses

A **floating** license is a network license that can be used by anybody connected to a single server. Annual maintenance subscriptions can be purchased for these licenses.

Unlimited Campus-wide Site Licenses

Academic institutions can buy unlimited site licenses, which are essentially an unlimited number of floating licenses. A home-use option is available with these licenses, as are maintenance subscriptions.

Time-limited Licenses

All licenses are available at reduced price for the period of a semester or a year. Contact customer service for specific quotes.

Free 30-Day Trial Licenses

30-Day trial licenses are full versions of our software available for evaluation purposes.

Ordering & Contact Information

Orders can be placed through our web store at www.mackichan.com, by phone, by fax, or by emailing orders@mackichan.com. Visa, Mastercard, and American Express credit cards are accepted, as are purchase orders from accredited academic institutions.

We offer quantity discounts, starting at quantity five.

Contact us for price quotes on fixed, floating, site, and time-limited licenses.

Contact us at:

Web	www.mackichan.com
<i>Hours</i>	M-F 7:30 AM to 5:00 PM, PT
<i>Toll-free</i>	877-724-9673
<i>Phone</i>	360-394-6033
<i>FAX</i>	360-394-6039
<i>Email</i>	info@mackichan.com
<i>Mail</i>	19307 8th Avenue NE, Suite C Poulsbo, WA 98370-7370

Free Technical Support:

<i>Hours</i>	M-F 8:00 AM to 5:00 PM, PT
<i>Toll-free</i>	877-724-9673
<i>Phone</i>	360-394-6033
<i>Email</i>	support@mackichan.com

"I am very proud of the fact that I used Scientific WorkPlace to write a total of 565 pages of graduate thesis work at the University of Waterloo. This was twice the total output for typical graduate students in my department, who generally used ordinary LaTeX. I am convinced that this would have been impossible without SWP, which dramatically increased my mathematical productivity."

Dr. Frederick W. Chapman
Visiting Professor
Drexel University

New Features in Version 6

- ◆ Runs natively on Windows and Mac OS X (Intel)
- ◆ Multiple levels of Undo
- ◆ Cross-platform document sharing is easy
- ◆ Supports advances in T_EX and L^AT_EX, including X_YT_EX.
- ◆ Supports any left-to-right and right-to-left language supported by your operating system
- ◆ Check Spelling in real-time with free open-source dictionaries
- ◆ Increased support for changing T_EX output formats
- ◆ Updated program window with a choice of “skins”
- ◆ Visual interface for page and table layout
- ◆ Compute and plot using the *MuPAD* 5 computer algebra system
- ◆ New file format includes an XHTML and MathML file with all attached graphics and plots

“This is the scientific word processor I’ve been waiting for. I love it!”

Walter Grantham
Washington State University



MacKichan Software, Inc.

19307 8th Avenue, Suite C
Poulsbo, WA 98370 USA
www.mackichan.com