WELCOME TO THE MARCH 2000 PERSONAL COMPUTER WORLD CD-ROM

March COVER DISC

GAMES | **APPLICATIONS** | LIBRARY | ENTERTAINMENT | INTERNET

We've got two great full programs this month: Morph Studio and, for anyone who wants to develop web pages beyond simple HTML or build applications using the cross-platform language, Java, we have a full copy of Borland's JBuilder™ 2 Professional.
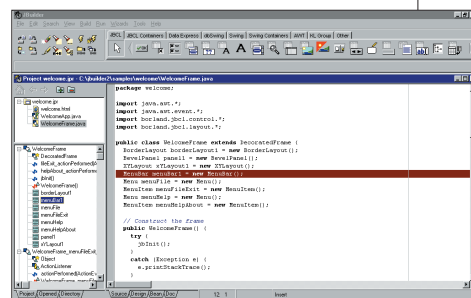
JBuilder 2 Professional

FULL VERSION

JBuilder established itself as the world's leading high-performance Java Rapid Application Development (RAD) tool. JBuilder 2 is the definitive tool for building truly cross-platform database applications that maximise the potential of 100 per cent pure Java. The benefits of this are:
- Write once, run anywhere applications
- Reduced maintenance and administration
- Simplified planning and implementation
- Lower development costs.

JBuilder 2 Professional
JBuilder goes beyond RAD, re-use and advanced compiler technology. It provides the scalability, reliability and extensibility necessary to build business-critical applications that span the enterprise. Builder 2 supports JDK 1.2 as well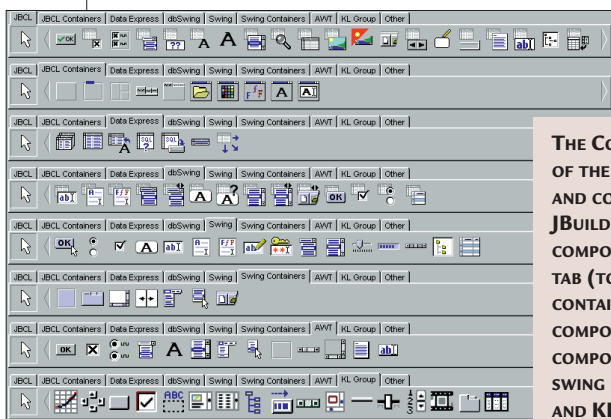 as other JDK versions via JDK Switching. JBuilder also includes a library of more than 200 Sun and third-party Java Beans.

Also included with JBuilder is Local InterBase 5.1.1. Small and powerful, InterBase includes advanced database features in only 2MB of RAM. No other SQL database rivals InterBase for ease of installation, use, and administration.

And that's not all. There's also Referentia for JBuilder – the fastest way to get productive in Java programming on Borland JBuilder. Narrated lesson animations and 3D concept visualisations get you up and running fast.

The JBuilder Editor has many powerful features that enhance your ability to work with text and code. In conjunction with JBuilder's three-paned AppBrowser, the editor provides both editing and navigation. It is a full-featured, syntax-highlighted programming editor with several popular keymappings.

Installing JBuilder
You can install JBuilder and additional modules directly from the *PCW* CD-ROM menu. When prompted, you will need to enter a serial number and authorisation key: Serial: 2000014093
Authorisation key: 96-7-0-0

IMPORTANT
If users of previous versions wish to install this version of JBuilder to the same location as your previous version, be sure to uninstall the previous version of JBuilder first. Manually delete the jbuilder\bin and jbuilder\lib directories that may remain after uninstall is run and then install this version of JBuilder.

THE COMPONENT PALETTE DISPLAYS MOST OF THE VISUAL JAVABEANS COMPONENTS AND CONTAINERS DELIVERED WITH JBUILDER. EACH PACKAGE OF RELATED COMPONENTS IS DISPLAYED ON A SEPARATE TAB (TOP TO BOTTOM: JBCL COMPONENTS; CONTAINERS; DATAEXPRESS DATA-AWARE COMPONENTS; JFC SWING DATA-AWARE COMPONENTS; JFC SWING COMPONENTS; SWING CONTAINERS; AWT COMPONENTS; AND KLGROUP COMPONENTS)
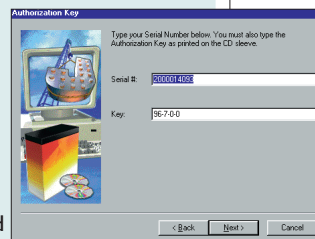
Getting started with JBuilder

Here's a short tutorial (also available online from within JBuilder), which demonstrates just how easy it is to create Java applets or applications using this powerful software. This 'hello world' example doesn't do very much... but it shows what can be achieved in just five minutes.

1 Creating your project
Choose File|Close All to close any open projects or files. Choose File|New and double-click the Application icon. To create an applet instead of an application, double-click the Applet icon instead. The Project Wizard is displayed. (JBuilder requires that you have a project open before you create an application or applet.)

For both applications and applets: Enter

```
JBuilder\myprojects\hello\✔
hello.jpr
```
                    (*Key:* ✔ *code string continues*)
in the File text field. Use the letter of the drive where JBuilder is installed.
Enter

```
HelloWorld
```

in the Title field. You can also enter your name, company name, and a description of the application or applet in the appropriate fields.

The Project Wizard should look like the screenshot below:
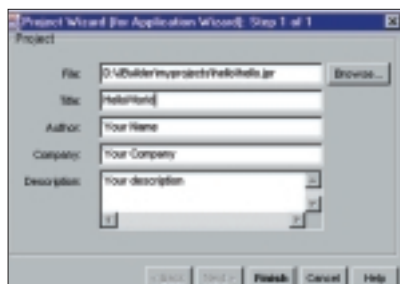
The only difference in the Project Wizard for application or applets is in the title bar display – for applications, the title bar displays '(for Application Wizard)'; for applets, it displays '(for Applet Wizard)'.

Click the Finish button. The AppBrowser appears showing the HTML page 'Project Notes' with the information you entered in the Project Wizard. The AppBrowser display is identical for applications and applets (see screenshot at the top of the next column).

2 Generating your source files
The Application and Applet Wizards create the .java files to go into the project skeleton created by the Project Wizard. The
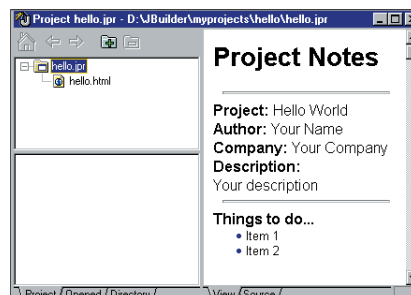
Applet Wizard also creates the HTML file that runs your applet. The wizard automatically appears after you click the Finish button in the Project Wizard. Decide whether you want to create a Java application or applet.
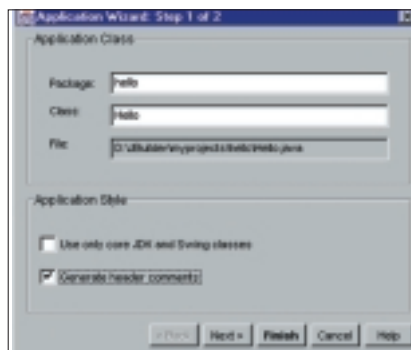
To create **an application**, see Generating source files for an application below.

To create **an applet**, skip to Generating source files for an applet.

Generating source files for application
Enter

```
Hello
```

in the Class field. This is a case-sensitive Java class name. You don't have to enter the package name; you entered it in the Project Wizard. Make sure that the Use Only Core JDK and Swing Classes option is unchecked.

Check Generate header comments, so that the information you entered for the Project Wizard will appear at the start of the all source files that the Application Wizard generates. The Application Wizard should look like the screenshot below:

Click the Next button and the Step 2 dialog box will appear. Enter

```
HelloFrame
```

in the Class text field (for Frame Class). Enter

```
Hello World
```

in the Title text field (for Frame Style). Check

all check boxes for additional application features. The code to support these features is generated by the Application Wizard.

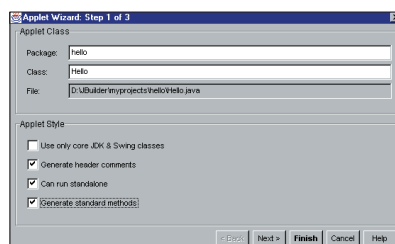The Application Wizard should look like the screenshot below.
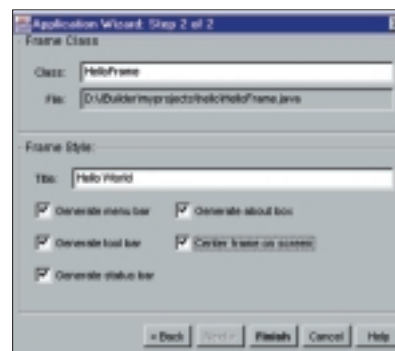
Click the Finish button. The new .java classes, .html files, and .gif files are added to your project. Choose File|Save All to save the source files.

Generating source files for an applet
Enter

```
Hello
```

in the Class field. This is a case-sensitive Java class name. You don't have to enter the package name; you entered it in the Project Wizard. Make sure the Use Only Core JDK and Swing Classes option is unchecked. Check the other three Applet Style boxes.

The Applet Wizard should look like this:

Click the Next button. The Step 2 dialog box appears, where you enter applet parameters. Enter

```
test
```

in the Name field. Choose

```
String
```

from the Type drop-down list. Enter

```
test_var
```

in the Variable field. The Applet Wizard should look like the screenshot on the following page.

Click the Finish button. Although there is a Step 3 dialog box for the Applet Wizard,

Applet Wizard: Step 2 of 3
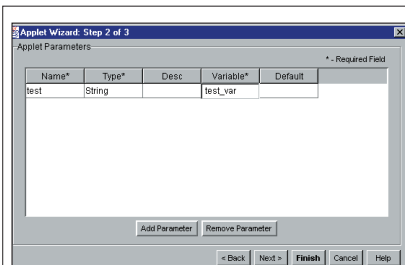
clicking Finish at this point accepts the defaults for that step. The new .java class and .html files are added to your project. The three files in the project are:
**hello.Hello.html: The applet HTML file.**
hello.html: The project HTML file.
hello.java: The applet source file.

Choose File|Save All to save the source files before continuing.

3 Compiling and running your app
Choose Run|Run, press F9 or click the button that looks like a lightning flash to compile and run your application. Your application or applet is displayed. Applets are displayed in the Applet Viewer. In this example, the applet only consists of a title bar; it does not contain a menu bar or button bar. Your application should look like the screenshot below.
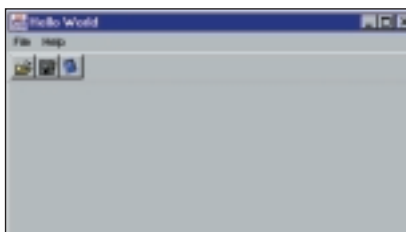
If you've created an application, you can click any of the buttons on the toolbar. However, because no events are hooked up to these buttons, nothing happens. Choose File|Exit to close your application. Click the close box to close your applet.

And, if that's given you a taste for making Java, you'll find plenty more examples and tutorials in the extensive online Help within JBuilder itself.

PCW DETAILS

System requirements *Intel Pentium 90MHz or higher, Windows 95/98 or NT4, 48MB of memory (Win 95/98), 65MB of free hard-disk space for compact install, CD-ROM drive, SVGA or higher-resolution monitor (800 x 600), mouse or other pointing device*
Sales contact *0800 454065*

UPGRADE NOW!
Special reader offer

If you want even more power and flexibility, why not upgrade to the very latest version of JBuilder?

60-DAY MONEY-BACK RISK-FREE GUARANTEE

PLEASE FILL IN YOUR ORDER DETAILS

*Postage & Packing (for UK orders only):
£7.50 for orders up to £500; £15 for orders over £500
Please allow 28 days for delivery. Products subject to availability.

THREE EASY WAYS TO ORDER

1 **BY PHONE 0800 454065**
Please have your credit/debit card ready.

2 **BY FAX 0800 454066**
Credit/debit card orders only please.

3 **BY POST**
1. Please make cheques payable to Inprise (UK) Limited.
2. Please use the freepost address.
Inprise (UK) Limited, FREEPOST SCE453, Twyford, Reading, Berkshire, RG10 9ZD
Please quote ref pcw0300

Product	Quantity	Offer Price	(£) Total
JBuilder 3 Enterprise upgrade		£1,199	
JBuilder 3 Professional upgrade		£249	
JBuilder 3 Standard upgrade		£84	
JB3 Enterprise for Solaris upgrade		£1,199	
Postage & Packing*			
VAT @ 17.5%			
TOTAL			

Methods of Payment ☐ Cheque ☐ Visa ☐ Access ☐ Switch – Issue Number ☐ Expiry Date ☐ ☐ ☐

Card Number ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Signed... Date...

Cardholder's Name / Address

Name...

Address...

....

Postcode...

Shipping Address (if different from left)

Name...

Address...

....

Postcode...

Your Name and our mailing list: We would like to keep you updated on our products by mail and occasionally we may make your details available to other reputable companies whom we deem to offer goods and services that may be of interest to you.
If you do not wish to receive product updates please tick. ☐   If you do not wish your name to be made available to third parties please tick. ☐

Morph Studio

FULL VERSION

This suite of morph-centric graphics programs does much more than just morph. You can create morph movies, animating between one image and another, as well as adding sophisticated special visual effects. What's more, Morph Studio comes with an additional program for organising your audiovisual image libraries (complete with a selection of photos to get you started), plus presentation tools and even a CD player!

Ulead Morph Editor

Morph Editor is a fun, easy-to-use program that allows you to take an image and then transform it, or part of it, into another. By animating this transformation process, you can create a video sequence that shows the original image growing out of, or into, the other – such as a man changing from a woman or a bird becoming a plane.

To add an even greater impact to your morphing work, Morph Editor comes with a range of advanced special effects and filters that can enhance and improve your images, turning otherwise standard morphs into stunning and eye-catching presentations.

The basics

Morphing is all about change; distorting the features or subject of one image, the start image, into another, the end image. How this distortion takes place is controlled by control points and control lines.

To better illustrate the use and behaviour of these control points and lines, it is useful to take a look at some of the common effects that can be created in Morph Editor, beginning with performing a crossfade.

This occurs whenever you perform a morph operation without placing any control points or lines. As such, the start image will gradually fade out while the end image fades in. Halfway through such a sequence the frame consists of 50 per cent of the start image and 50 per cent of the end image.

The problem with crossfading, however, is the 'ghosting' effect, or shadowing, that occurs when the images are fading in and out, as well as the lack of distortion. By placing control points and lines in strategic positions on and around the features of the images you want to morph, you can better control how one image merges into the other.

After installation you will find a sample morph file (MOF) in the SAMPLES subdirectory under your installation directory. To open this file, or any other morph file, choose the Open command in the File menu. The Open dialog box appears. To open the sample file, simply click on its filename and press OK. (Double-clicking on the filename also opens the file.) The dialog box then closes and the file is opened in the Morph Editor

THE USEFUL WARP FEATURE ALLOWS YOU TO DISTORT ONE OR BOTH IMAGES USING A DRAGGABLE 'MESH'

workspace.

Morph files are displayed in the control window, which consists of two image windows and a toolbar. The image windows display your start and end images with any control points or lines that you have defined. The toolbar contains tools for applying and manipulating the control settings and provides direct access to commonly used menu commands. (When you position your mouse over a tool in the toolbar, a hint message appears in the status bar describing the tool's function.)

Both images placed into a control window must be of the same dimensions. If they are different, you can crop or resample them accordingly.

The total number of pixels in an image must be divisible by four. If it is not, Morph Editor automatically crops the image. (At most this will result in a loss of three pixels.)

Morph Editor only works with greyscale or RGB True Color images. If you use an Indexed or Hi-Color image, it will be converted to RGB True Color; black & white images are converted to greyscale.

PCW DETAILS

Platform
Morph Studio works with either Windows 3.1 or 95/98. You'll need a Pentium PC or faster, with 5MB of hard disk space free (20MB recommended), and SVGA display.

Technical information to help you use the CD

✔ **How to use the CD-ROM**
Put the disc into your CD drive:
If you've got **Windows 9x** the *PCW* interactive loader will appear on your screen. If your CD doesn't autoload, go to Start/Run and type in <CD Drive>:\pcw.exe
Windows 3.1 From Windows Program Manager, choose File/Run, then type in <CD Drive>:\pcw.exe and press enter.
✔ **Faulty discs**
If you have a faulty disc please return it with your name and address, clearly marked
'**PCW CD MARCH 2000**' to:
TIB plc
HelpLine Returns
Unit 5 Triangle Business Park

Pentrebach
Merthyr Tydfill
Mid Glamorgan CF48 4YB
quoting ref '*PCW Vol 23 No 3*'.
A replacement disc will be sent to you.
NOTE: *These cannot be supplied direct from VNU.*
✔ **Technical support**
If you have technical problems with individual products, please check in the magazine or on the CD for the manufacturer's support contact details. For general problems with the CD, the Technical Helpline is open weekdays from 10:30am to 12:30pm and 1.30pm to 4:30pm on **01685 354726**.
A live technical info page is also available through CDOnline direct from the CD.

✔ **Getting software on to the CD**
Personal Computer World is keen to promote quality software and would like to hear from you if you are interested in having your product included on a future cover disc. For cover-mount enquiries please telephone **Jonathan Hardy** on 020 7316 9851 or email
jonathan_hardy@vnu.co.uk

IMPORTANT NOTICE

The publisher, VNU, has checked the *PCW* CD-ROM for known viruses at all stages of production, but cannot accept liability for damage caused either to your data or your computer system, which may occur while using either the disc or any software contained on it. If you do not agree with these conditions, you should not use the disc.