**JClass ServerChart 3DTM**

**Programmer’s Guide**

for Java 2 (JDK 1.2.2 and higher)

\*alpha release\*

***Interactive 3D Charts for J2EE Application Servers***



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November 2001 RefNo: PRGDE-JC\_SC\_3D\_alpha/11/01

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# Preface

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## Introducing JClass ServerChart 3D

JClass ServerChart 3D is a powerful Java 3D charting tool. It enables developers to build 3D data views and interactive displays, giving their applications a professional look and feel. JClass ServerChart 3D allows you to create stunning 3D graphics using the Java 2D API.

With JClass ServerChart 3D, you can add 3D functionality using Java2 technology – meaning that the heavyweight Java 3D API won’t need to be included in your applications.

JClass ServerChart 3D is written entirely in Java. The chart component displays data graphically in a window and can interact with a user.

The chart component can be used easily by all types of Java programmers:

* Component users, setting JClass ServerChart 3D properties programmatically
* OO developers, instantiating and extending JClass ServerChart 3D objects
* JavaBean developers, setting JClass ServerChart 3D properties using a third-party Integrated Development Environment (IDE)

You can freely distribute Java applets and applications containing JClass components according to the terms of the License Agreement that appears during the installation.

Because this is an alpha release, there is minimal documentation. For in-depth information, please refer to the *readme* file that is automatically installed into JCLASS\_SERVER\_HOME\ when you install JClass ServerChart 3D.

**Feature Overview**

You can set the properties of JClass ServerChart 3D objects to determine how the chart will look and behave. You can control:

* Chart type (surface, bar, or scatter plot)
* Header and footer positioning, border style, text, font, and color
* Number of data views, each having its own data, and chart type. Currently, only one data view is supported.
* Flexible data loading from files, URLs, input streams, and databases
* Chart styles for scatter plots: line color, fill color, point size, point style, and point color
* Contour levels: Use the default linear distribution or provide your own
* Contour styles: Contour line styles and contour zones colors are all customizable
* Plot cube scaling in x, y, z directions
* Legend positioning, orientation, border style, layout style, distribution range limiting, anchor, font, and color
* Chart positioning, border style, color, width, height and axes rotation
* Axis labelling using Data labels, Value labels, or pleasing precompiled values
* An X, Y and Z axes, each having its own minimum and maximum, grid lines, annotation method, font, and title
* Control of user interaction with components including picking, mapping, Chart 3D Customizer, rotation, scaling, and translation
* Ability to add a 4th dimension to the data via color
* Contour maps through 2D projections of data
* Hidden-line display, surface colors, and mesh colors
* 3D rotation and perspective

**Assumptions**

This manual assumes that you have some experience with the Java programming

language. You should have a basic understanding of object-oriented programming

and Java programming concepts such as classes, methods, and packages before

proceeding with this manual. See “Related Documents” on page 3. for additional

sources of Java-related information.

## Typographical Conventions

|  |  |
| --- | --- |
| Typewriter Font | * Java language source code and examples of file contents. * JClass Chart 3D and Java classes, objects, methods, properties, constants, and events. * HTML documents, tags, and attributes. * Commands that you enter on the screen. |
| *Italic Text* | * Pathnames, filenames, URLSs, programs, and method parameters. * New terms as they are introduced, and to emphasize important words. * Figure and table titels. * The names of other documents referenced in this manual, such as *Java in a Nutshell*. |
| **Bold** | * Keyboard key neames and menu references. |

**Related Documents**

The following is a sample of useful references to Java and JavaBeans programming:

* “*Java Platform Documentation*” at *http://java.sun.com/docs/index.html* and the *“Java Tutorial”* at *http://java.sun.com/docs/books/tutorial/index.html* from Sun Microsystems
* For an introduction to creating enhanced user interfaces, see *“Creating a GUI with JFC/Swing”* at *http://java.sun.com/docs/books/tutorial/uiswing/index.html*
* *Java in a Nutshell, 2nd Edition* from O’Reilly & Associates Inc. See the O’Reilly Java Resource Center at *http://java.oreilly.com*
* Resources for using JavaBeans at *http://java.sun.com/beans/resources.html*
* For a comprehensive introduction to Java 3D, VRML97, MPEG-4/BIFS, and X3D, see *Core Web3D* from Prentice Hall. See the publisher’s Web site at *http://vig.prenhall.com/* or the book’s Web page at *http://www.CoreWeb3D.com*
* Learn about the Web3D Consortium (provides a forum for the creation of open standards for Web3D specifications) at *http://www.web3d.org/*

These documents are not required to develop applications using JClass ServerChart 3D, but they can provide useful background information on various aspects of the Java programming language.

**Licensing**

In order to use JClass ServerChart 3D, you need a valid license file (either evaluation or permanent). This license file is sent to you from Sitraka and needs to be in your CLASSPATH. Each JClass product requires its own license file. Note that one license file can cover multiple hosts and multiple CPUs.

When you install JClass ServerChart 3D, a License Wizard will appear to help you install the license file. If you choose to install or change the license file at a later time, you can access the License Wizard by running *LicenseWizard.bat* (Windows installation) or *LicenseWizard.sh* (non-Windows installation), found in *JCLASS\_SERVER\_HOME/bin/*, where *JCLASS\_SERVER\_HOME* is the directory where you installed JClass ServerChart 3D.

Licenses are transferable; please visit the Sitraka Web site at *http://www.sitraka.com/software/support/jclass/tsjclasssupport.html*, email *jclass\_support@sitraka.com*, or telephone 1-800-663-4723.

If you try to use a JClass product without a valid license file, a warning message will appear and you will not be able to use the product. To purchase any JClass product, please contact Sitraka at *http://www.sitraka.com/buy/* or telephone 1-800-663-4723.

**Evaluation versions**

Evaluation copies of JClass ServerChart 3D also require a license file.

**JClass License Agreements**

JClass License Agreements can be found online at

*http://www.sitraka.com/software/support/jclass/tsjclasslicensing.html*

**Technical Support**

Many of the initial questions you may have are basic installation or configuration problems. Consult this product’s *readme* file and the *Getting Started Guide* (available in HTML and PDF formats) for help with these types of problems.

Sitraka’s **Gold Support with Subscription** plan is included with your purchase and entitles registered users with a valid JClass software license to the following support:

* Product documentation, API reference, and demos and examples, included with the product and/or downloadable from our Web site, and/or available online.
* All product upgrade releases; download from our Web site.
* FAQ Documents on our Web site.
* JClass Knowledge Base, a searchable collection of information including program samples and problem/resolution documents.
* SupportWatch, a convenient way to log and track support requests over the Web.
* Direct technical support for one full year.
* JClass Forum Newsgroup, where you can communicate with other developers using JClass products around the world.

For additional information and pricing for JClass **Gold Support with Subscription**, please visit our online store or your JClass reseller. You can also email *sales@sitraka.com*.

**To Contact JClass Support**

Any request for support *must* include your JClass product serial number. Supplying the following information will help us serve you better:

* Your name, email address, telephone number, company name, and country
* The product version and serial number
* The JDK (and IDE, if applicable) that you are using
* The type and version of the operating system you are using
* Your development environment and its version
* A full description of the problem, including any error messages and the steps required to duplicate it

You may also use our online email form to submit the above, available at

*http://www.sitraka.com/software/support/jclass/tsjclasssupport.html*

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| --- | --- |
| **JClass Direct Technical Support** | |
| **SupportWatch (Web-based support tool)** | *https://supportwatch.sitraka.com* (to help protect the confidentiality of your information, SupportWatch is provided over a secure Internet connection) |
| **JClass Support Email** | *jclass\_support@sitraka.com* |
| **Telephone** | 800-663-4723 (toll free in North America) or 416-594-1026 Available Monday – Friday, 9:00 a.m. to 8:00 p.m. EST |
| **Fax** | 416-594-1919 |
| **European Customers Contact Information** | Email: [*eurosupport@sitraka.com*](mailto:eurosupport@sitraka.com)Telephone: +31 (0)20 510-6700 Fax: +31 (0)20 470-0326 Available Monday – Friday, 9:00 a.m. to 5:00 p.m. CET |
| **Other Support Resources** | |
| **Using JClass in IDEs** | *http://www.sitraka.com/software/jclass/jclassides.html* |
| **JClas FAQs** | *http://www.sitraka.com/software/support/jclass/tsjclassfaq.html* |
| **JClass Technical Support (links to Knowledge Base)** | *http://www.sitraka.com/software/support/jclass/tsjclasssupport.html* |
| **JClass ServerChart 3D Forum Newsgroup** | *http://lister.sitraka.com/cgi-bin/dnewsweb* |

**Product Feedback and Announcements**

We are interested in hearing about how you use JClass ServerChart 3D, any problems you encounter, or any additional features you would find helpful. The majority of enhancements to JClass products are the result of customer requests.

Please send your comments to:

**Sitraka**

260 King Street East

Toronto, Ontario, M5A 4L5 Canada

Phone: 416-594-1026

Fax: 416-594-1919

Email: *jclass\_suggestionbox@sitraka.com*

While we appreciate your feedback, we cannot guarantee a response. Please do not use the dev\_jclass email address for technical support questions.

Occasionally, we send JClass-related product announcements to our customers using an email list. To add yourself to this mailing list, send email with the word “subscribe” in the body of the message to *javanews-request@sitraka.com*. Visit the Sitraka Web site at *http://www.sitraka.com* for more details.