

# ViewCafé® 3.3

## Product Profile

ViewCafé is a Web-based, Java™ 2-powered document viewing, markup and collaboration tool that enables businesses to access, share, distribute and cooperatively review documents across the organization and throughout the extended enterprise. ViewCafé enables cross-platform functionality using a standard Web browser, such as Microsoft Internet Explorer or Netscape Navigator, and features familiar and intuitive tools. ViewCafé can also function as a standalone application, independently of a Web browser. In many cases, users require little to no training, making enterprise-wide deployment quick and easy. Scalable architecture gives ViewCafé the ability to handle virtually a limitless number of users while its customizable API gives administrators complete control over security and functionality.

### Target Industries:

- Manufacturing
- Architecture/Engineering/ Construction (AEC)
- Geographic Information Systems (GIS)
- Records Information Management (RIM), Government, Utilities

### Applications:

- Electronic Data Management (EDM)
- Enterprise Content Management (ECM)
- Product Data Management (PDM)
- Product Life Cycle Management (PLM)
- Enterprise Asset Management (EAM)
- Collaborative Project Review

- Manage Complex Design & Analysis with Easy Measurement for 3D Models, GIS Maps, Architectural Drawings
- View and Markup Session Tracking
- Protect Intellectual Data
- Engineering Change Notifications
- Online Supply Chain Procurement
- Document Retrieval
- Records Archiving
- File Conversion
- Redaction
- ISO Compliance
- Safety and Environmental Compliance
- Plant and Facility Design Management

- Online document viewing, markup and collaboration capabilities using a standard Web browser or a standalone application.
- Deploy rapidly across the organization and throughout the extended enterprise.
- Java 2 and Java 3D technology for superior viewing and printing capabilities.



## Featured in this Release

### What's new in Release 3.3

#### **NEW!** Formats

These file formats are now supported in ViewCafé:

- AutoCAD 2004, 2005
- JT
- AutoDesk Inventor
- DWG Embedded ACIS 3D read and render as 2D data
- DWF 6.0
- PDF 1.5 (Acrobat 6)

#### **NEW!** 3D Publishing

ViewCafé now provides Publishing for 3D models. 3D publishing allows you to create cached versions, generate a reduced level of detail version, and render a model as it is loaded. Publishing can speed up initial display times for large 3D models and, through Fast Animation, can enable faster interaction with the model by improving render time.

#### **NEW!** License Files and License Manager Server Page

License Files are required for both Clients and Servers. Depending on the file types you view in your ViewCafé system, you require different license types: Client licenses can be Standard or Technical and Server licenses can be Basic or 3D+. To learn more, see page 14. The new License Manager Server Page displays details about available Client and Server license files and about license file usage.

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**SPICER**  
CORPORATION

ViewCafé 3.3

# Native File Viewing

## *Freedom to open files without the original software*

### ? What is native file viewing?

ViewCafé enables users to open, view and mark up hundreds of file formats (see Supported File Formats list) without converting them to another format. Native file viewing is the fastest, most efficient method for accessing the valuable information stored in your documents.

### ! Requesting Support for a Format

This is a partial list of supported formats. If you require support for a format that is not listed, contact your Spicer Sales Manager. Spicer is always adding new formats. We may already be working on the format you need.

### ! Formats and Licenses

ViewCafé 3.3 offers 2 types of Client License files: Standard and Technical. The formats that can be opened vary with each License type.

A Client with a Standard License can view:

- All rasters
- EDT
- All text formats (RTF, WordPerfect, ASCII text, MS Word, MS Write, Autotrol, WMF, Excel, Postscript, COLD, XMS, SVG and Visio)
- PDFs up to 336 sq in (16x21— just under C-size)

Any Client that requests more than the standard functionality requires a Technical license instead of the Standard one.

For details on Licensing, see page 14.

Display documents in their native file format without the application that was used to create them. ViewCafé enables quick, reliable and secure online access to hundreds of industry standard file formats. Markups are saved in a separate file, ensuring that the original document is never altered.

### NEW! Formats for ViewCafé 3.3

- AutoCAD 2004, 2005
- JT
- AutoDesk Inventor
- DWG Embedded ACIS 3D read and render as 2D data
- DWF 6.0
- PDF 1.5 (Acrobat 6)

### Supported File Formats (partial list)

#### CAD

AutoCAD (DWG, DWF)  
CADRA  
CAD Overlay  
CoCreate ME10 DXF  
Gerber (RS 274-D & RS 274-X)  
GTX RasterCAD  
Microstation DGN, DGN v8  
Softelec VPMMax  
Visio (\*.vsd) preview

#### 3D CAD

AutoDesk Inventor  
CATIA  
IGES  
ProE  
SAT  
SolidWorks parts (\*.sldprt) and assemblies (\*.sldasm)  
STEP  
STL  
UGS JT  
VDA-FS  
VRML  
XGL/ZGL

#### Raster

AIIM Type II  
Auto-trol DX  
Brooktrout FAX  
CAD Overlay  
Calcomp CCRF  
CAL5  
Compuserve GIF  
DCX Multipage  
DDIFF  
EDMICS C4  
FileNET Banded  
FileNET Tiled  
Formtek  
GEM IMG

Group IV  
GTX Group IV  
Hitachi Raster HRF  
IBM IOCA  
Image Machines TG4/IG4  
ImageCenter TG4  
Intergraph  
JEDMICS  
JFIF-JPEG  
JPEG 2000  
LaserData  
MicroDynamics MARS  
MrSID  
OS/2 BMP  
PCX  
Photomatrix Group 3 & 4  
PNG  
Progressive JFIF  
RLC, RLC 2, RCLX  
Skantek  
Sun Raster  
Targa Truevision  
TIFF (various)  
Versatec VDS  
Vidar  
Windows BMP  
WINFAX Pro  
WordPerfect WPG  
Xerox Docuplex  
Xionics Group 4  
XWD RAW  
Zsoft ZGF

#### Vector Graphics

AQU  
Auto-trol DG  
Auto-trol TI  
CADD5  
CGM  
CIMAGE DWG  
Compressed MI  
Enhanced Metafile EMF

Macintosh PICT  
MI  
Micrographx DRW  
SVG  
Visio (\*.vsd) preview  
Windows Metafile WMF  
XMS

#### Text

Adobe Acrobat PDF  
ASCII Binary & Text  
Microsoft Excel  
Microsoft PowerPoint  
Microsoft RTF  
Microsoft Word  
OMNEX Aqua II  
OTG COLD  
TeamWorks (TW) COLD  
WordPerfect  
ZIP

#### Print/Plot

Adobe Acrobat PDF  
PostScript  
EPS  
HPGL  
HPGL/2  
HP RTL  
Calcomp 906/907

# The Benefits of ViewCafé and Java Technology

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## *Superior networking, viewing and printing capabilities*

ViewCafé relies on Sun Microsystems' Java technology to deliver a secure, portable, and scalable networked or Web-based application. ViewCafé users in the office or in the field can access data, for instance in a document repository, through either a network or an Internet connection. Information is easily shared internally and with offsite clients and business partners, regardless of computer platform or operating system – PC, Macintosh or Linux/UNIX computers can all run applications written in Java.

### **100% Platform Independent Client-side Functionality**

The ViewCafé Client is created entirely with Java, enabling it to function in a standard Web browser or as part of a standalone application, regardless of the user's operating system. Windows, Macintosh, UNIX, or Linux operating system users can all take advantage of ViewCafé's collaborative document review capabilities.

### **Client-side Rendering**

Document rendering is performed using the Client machine's resources, resulting in reduced network traffic and server load, while providing high quality images. The Java rendering engine in ViewCafé enables robust rendering of text and drawings.

### **Local Caching of Java Applet**

Client machines can save the ViewCafé Java applet in a plug-in-based cache, eliminating the need to download the applet each time ViewCafé is launched. Prior to launching the applet from the client's hard disk, ViewCafé verifies with the server that the most current version is in the cache.

### **Java 3D Capabilities**

Java 3D is the most robust and well rounded 3D rendering API available for cross-platform, high quality 3D graphics in the networked, collaborative enterprise. Java 3D complements ViewCafé's existing Java technology to maintain a 100% Java-based applet that offers a high level of security, robust client communications and rendering capabilities.

### **Full Resolution Printing**

Produce accurate, full resolution prints for all document sizes. ViewCafé can print documents up to the maximum resolution of the printer, whether it is 600 dpi, 1200 dpi or higher. The printing power of ViewCafé is further enhanced with a range of printing functions that give users several output options. See page 10 for more information.

## **NEW!** Featured in this Release

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### *Additional New Features*

**Linux Server:** The new ViewCafé Linux Server (ViewCafé Release 3.22), available for Red Hat Linux 7.2, provides scalable server architecture, document handling, load balancing and format loading, allowing administrators can take full advantage of the extremely secure and reliable nature of Linux.

**New Tools:** The Retain Transformations tool maintains view changes across multiple pages. The Magnify Area tool zooms in on a small section of the image with a floating, moveable window.

**JRE versions:** Versions of the Java Runtime Environment on the Client and Server no longer need to be the same.

### **? What is Java?**

Java is a simplified object-oriented programming language which is highly suitable for Web-based development. Java code can run on most platforms and operating systems since it is interpreted by a Java Virtual Machine (JVM) directly on the end user's system.

### **? What is a Java applet?**

An applet is a program, written in the Java language, that can be included in an HTML page, much in the same way an image is included. When you use a browser to view a page that contains a Java applet, the applet's code is transferred to your system and executed by the browser's Java Virtual Machine (JVM).

### **? What is Java 3D?**

Java 3D is the most well-rounded 3D rendering API available today for high-quality, scalable, cross-platform 3D graphics. Java 3D is a synergistic extension of the Java 2 platform and only Java 2 powered applets or applications such as ViewCafé can incorporate Java 3D.

# Navigation and Display

## *View hundreds of file formats quickly and accurately*

ViewCafé technology makes file navigation and display quick and accurate. Additionally, ViewCafé features familiar and easy-to-use navigation tools, such as drop-down menus and intuitive buttons, for simple operation and rapid adoption by all users.

### **Spicer ThinSpeed™ Data Streaming Technology**

Spicer ThinSpeed™ data streaming technology ensures high document fidelity while maintaining peak performance. For optimum download speeds, ThinSpeed quickly and efficiently manages data streaming from the server to the client.

### **Enhanced File Open and Save Functions**

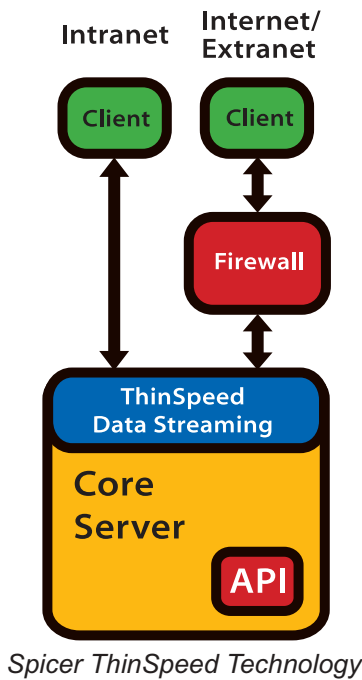
In addition to accessing document and markup files from a central repository, ViewCafé also gives users the option to open files from a local hard disk. Markup sessions can also be saved to a local hard disk.

### **Interruptible File and Page Loading**

ViewCafé users can interrupt the loading and rendering of a file, or a page of the file, and either select a different file or jump ahead to the next page of a multipage document.

### **View Multiple Documents Simultaneously**

A single ViewCafé Java applet can display multiple 2D documents simultaneously. It is not necessary to launch another applet for each document requested. Users can navigate through multi-document screens using the Windows menu or by clicking on the desired window in the ViewCafé applet. The Close Files dialog box lets users close multiple documents at one time.



Spicer ThinSpeed Technology

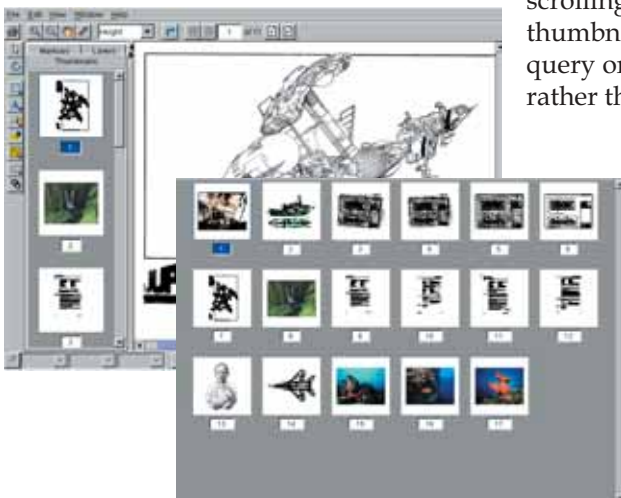


Page Controls for easy multipage document navigation

### **Easy-to-Use Multipage Document Navigation Tools**

Use the Page Controls to jump to the start or finish of a multipage document or move forwards or backwards through a document one page at a time. Enter a page number in the text box to jump to a specific page.

Thumbnails Window



Navigate through a multipage document using the thumbnail previews rather than scrolling or viewing each page. Integrators have the flexibility to use thumbnail views in many ways. For example, integrations that incorporate query or search functions can display document search results as thumbnails rather than text links.

### **Text Search**

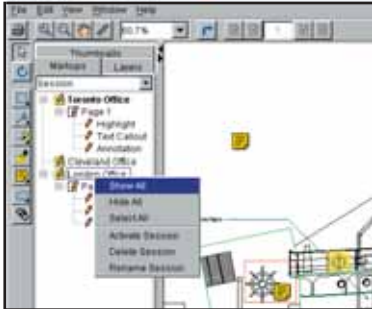
Use ViewCafé's text search tool to quickly locate text strings in files such as engineering and office documents. Search options include Match Case, Whole Words Only, and Current Page Only. You can also enable a flashing highlight so any located text strings are easier to see.

# Navigation and Display

## View and manipulate 2D and 3D documents

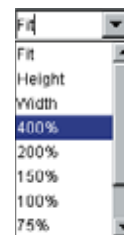
### Review Markup Objects with the Markup Explorer

Find and select markups by page or session (author) using the Markup Explorer window. Navigating through markups is easy. Just click on the markup in the Explorer window and ViewCafé instantly transports you to it. Conversely, click on the markup in the drawing, and the markup is highlighted in the Explorer, so you can identify the author in a collaborative document review process where multiple individuals may be adding markups to the same drawing. The Markup Explorer also allows users to display or hide any markups in a document and to define new names for markup objects during a review session.



### See What You Want to See: Zoom, Pan and Rotate Documents

Use the view tools, Magnify, Reduce, and Pan, to see the document exactly how you want it. Familiar magnify and reduce tools quickly zoom in to the desired area of a drawing or zoom out for the complete picture. Select from a drop-down menu to fit the document by height, width or entire page, or select from pre-set magnification factors. Use the Pan tool to move a document around and view all areas. Single click Rotate Right and Rotate Left tools offer rapid rotation of your document in 90-degree increments.

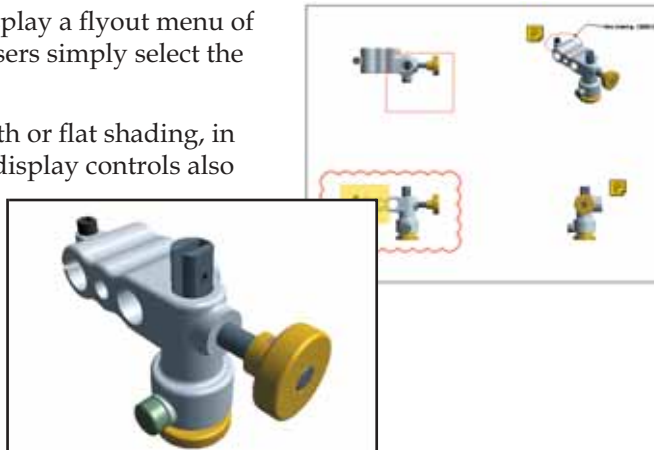


### Display 3D Models

Toggle from 3D Model mode to 2D Projection mode to display a three-dimensional image or a four-panel projection of the critical views of the model. Use ViewCafé's intuitive tools to add markups to documents for collaborative review sessions.

Mouse over the 3D toolbar to display a flyout menu of ViewCafé's predefined views. Users simply select the desired view from the menu.

Display 3D drawings with smooth or flat shading, in wireframe, or as points. The 3D display controls also let users view the model with or without a Bounding Box or in Perspective Projection. Users can set the display style to Fast Animation for quicker rendering of a model during interaction, for example while rotating or panning.



### Dynamically Zoom, Rotate and Pan 3D Models

With the Free Zoom and Free Rotate tools, move the 3D model to precisely the point you want. Magnify and reduce the model with a quick mouse movement up, or down or grab the model and position it in any orientation to examine any side. Instantly resize the 3D model to fit in the ViewCafé window with the single click Zoom to Fit tool. Set the model spinning on a central axis to easily display or examine it. The direction and speed of the rotation can be changed using the Autospin cursor.

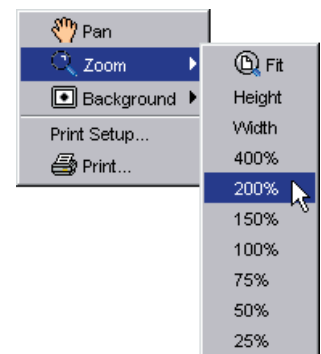
### ! Right Mouse Button (RMB) Menus

Right click on a document or in the Markup Explorer to reveal context menus with common commands. The commands available depend on where you click and the type of document you have open.

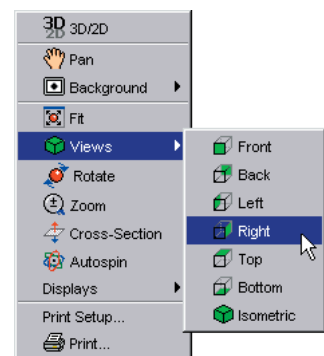
Select an individual markup in the Markup Explorer and right click on it to access commands such as hide, show or delete.

Select a markup session and right click to display an options menu that lets you show, hide, or select an entire group of markups.

Right click in an open document window to access navigation and printing commands.



Right mouse menu for a 2D document



Right mouse menu for a 3D model

# Navigation and Display

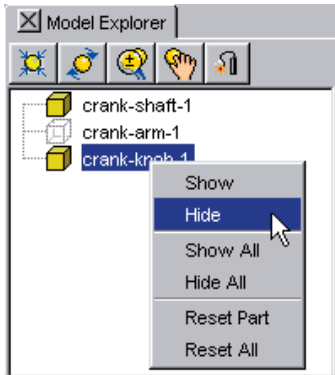
*Set custom views, see file properties, and measure objects*

## **NEW!** Display All Pages of a Document with an Identical View

Use the new Retain Transformations tool to display all pages of a document with the same view settings. Enable the tool and perform the required view changes on any page of your document. This includes zooming and rotating. Page through the document. The view settings are the same for all pages. The settings are retained for the current document and for future documents until the tool is turned off.

### **!** RMB Menu

The Model Explorer contains a right mouse button menu with commands to show or hide parts



### Show Only the Layers You Need

Display or hide any layer in a document simply by clicking on its icon in the Layers window.

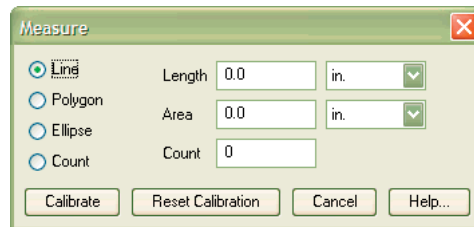


### Review Document Properties

Open the File Properties dialog box to view information such as file name, format, page size, page resolution, and file size. Select the units of display for the dialog box.

### Measuring Distance or Area and Counting Objects

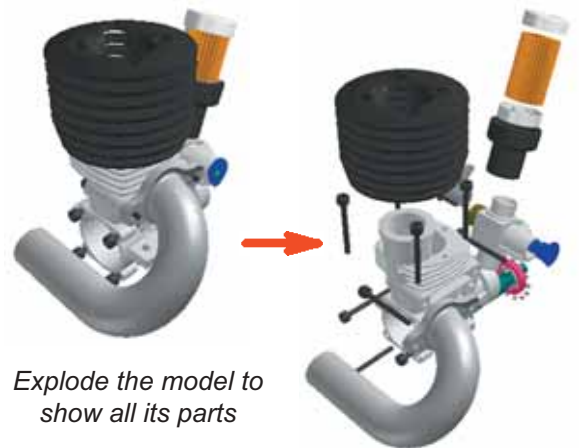
Measure the linear distance and area of polylines, rectangles and ellipses. Units of measurement



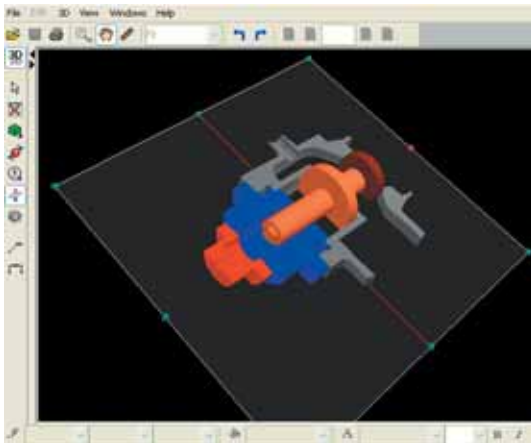
can be switched quickly among inches, feet, centimeters, millimeters, and meters. Easily calibrate the tool to provide measurements to the scale of the drawing. Use the counting feature to place markers on a document and keep track of material takeoff measurements.

### Explore Parts in a 3D Model

View and manipulate parts of certain 3D models with the Model Explorer. Each part can be individually selected, moved, zoomed, or rotated. "Explode" the entire model around its center or around a specific part to see how parts relate. Show or hide specific parts to get a clear view of the model's structure.



*Explode the model to show all its parts*



### Examine 3D Models Inside and Out with Cross-Sectioning

Position the Cross-Sectioning Plane anywhere on a 3D model to view the interior. The Plane cuts away part of the model so the internal structures are visible. Rotate or move the Plane to view all sides of the model simply by dragging the Plane handles.

# Markup Functions

## Powerful yet simple tools

Creating and saving markups in ViewCafé is simple and intuitive. Integrators can choose several different formats for saving markups, increasing the compatibility and portability of ViewCafé documents. Markup tools include shapes, text, lines, highlights, annotations and callouts. ViewCafé's Markup Explorer lets users easily navigate among markups by page or by session. Markups in multipage documents can be displayed by page number in the Markup Explorer, and arranged by type or by author for each page.

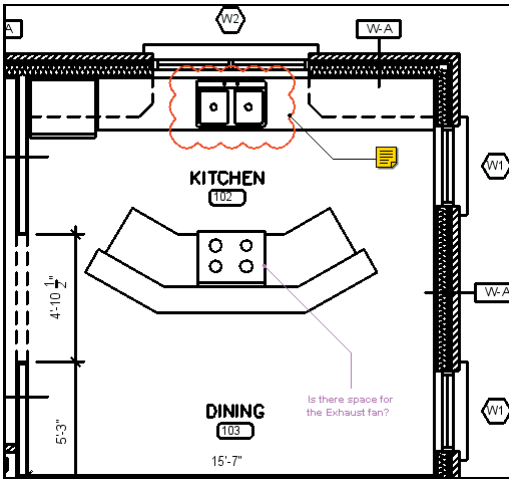
### Save Markups in Multiple Formats

By default, markups are saved in XMS, a standard XML-based format, or in SVG (Scalable Vector Graphics), an XML-based vector format for describing two-dimensional graphics. Both XMS and SVG can be read by Spicer Imagenation and Image a•X. SVG markups from Imagenation and Image a•X can also be opened in ViewCafé, for true interoperable functionality between Spicer products.

Markups can also be saved in one or more native formats, including DXFASCII, Microstation RDL, CGM (clear text version), CIMAGE DWG, HPGL, and Spicer EDT format, allowing you to open and view documents and markups in the original application.

### Draw Shape, Text, Annotation and Highlight Markups

Create cloud, rectangular, circular, diamond, triangular, and cross-out shapes on any document. Draw straight lines or free-flowing curves anywhere on the page.



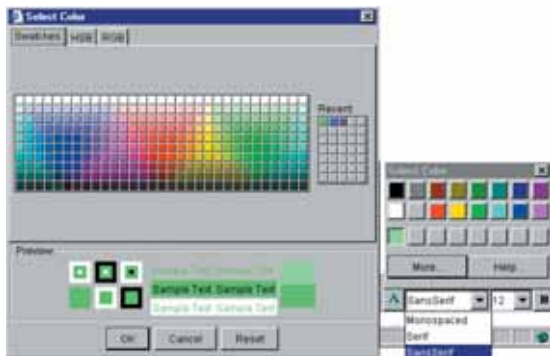
Communicate required information directly on the document through text and text callout markups. Add annotations or annotation callouts to share comments or detailed notes on the document in an icon format. Other members of the review team simply double click on the icon to open the annotation and see your message.

Apply translucent highlights to emphasize areas of a drawing.

### Customize Markup Preferences

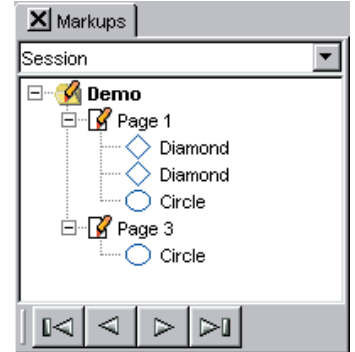
ViewCafé gives complete control over markup attributes through the Markup Properties toolbar. Depending on the type of markup selected, different options are

available. Define line and shape properties that include color, fill, line thickness and whether lines are solid or broken. Lines can also be capped with open, closed, or circular arrowheads. Set text attributes such as color, size, font, bold, italic and style (serif, sans serif and monospaced type). Choose color characteristics from a standard color swatch palette or create custom RGB or HSB colors.

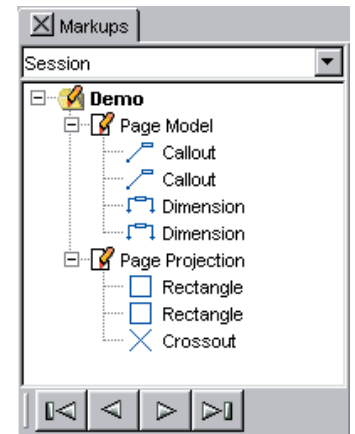


Use Color and Line palettes to set custom markup properties

### Markup Explorer Display



The Markup Explorer displays markups on different pages of 2D documents (above) and markups on 3D documents in Projection or Model mode. (below)

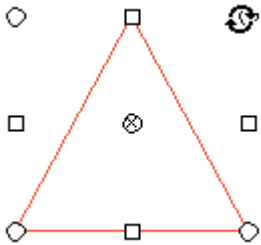


# Markup Functions

## Special purpose tools and 3D markups

### Move and Rotate Markups

Select markups created in ViewCafé and rotate them through 360 degrees. Stretch or shrink selected markups by dragging the corner handles. Cut, copy and paste or delete markups you created. Easily select all markups with the Edit, Select All menu command.



A triangle markup selected for rotation - drag the corner handles to rotate

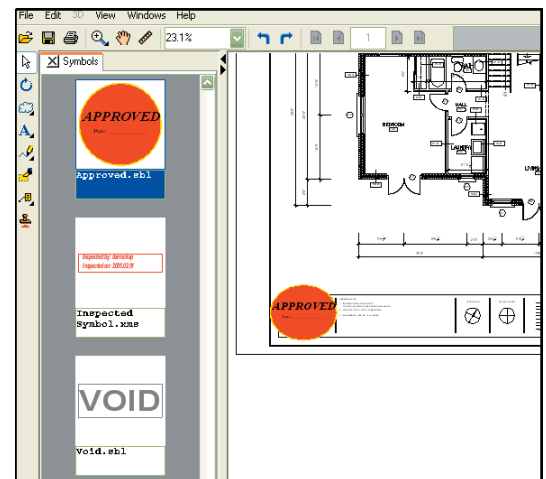
### Quickly Apply Custom Symbols

Place custom symbols on a document. A thumbnail-style symbols library can be displayed in the Symbols Window so commonly used symbols, such as approval or inspection stamps, can be quickly added to a document.

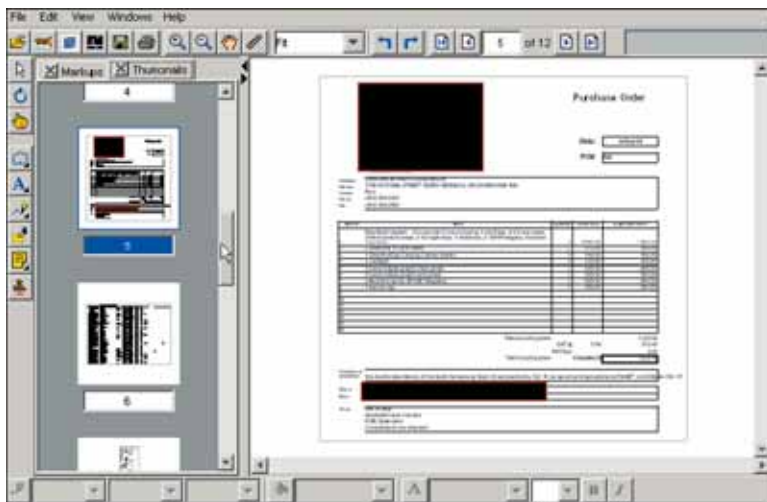
### Hide Sensitive Data with Redaction

ViewCafé's redaction capability allows integrators to force redaction markups on a specific portion of a document, obscuring or blocking out private information in sensitive files.

Draw custom symbols in one step



Place callouts on 3D models. Callouts move and spin with the model.



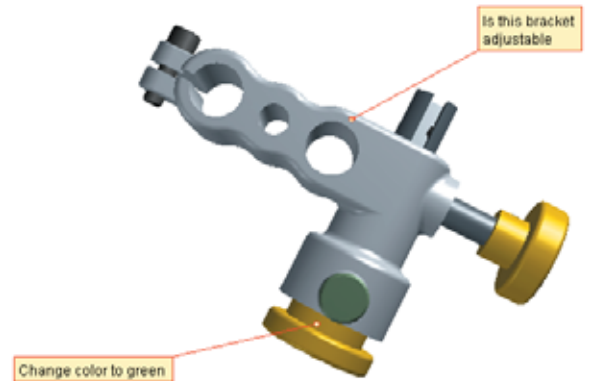
Use Redaction features to block out private information, such as names or account numbers.

### Add Comments to 3D Models

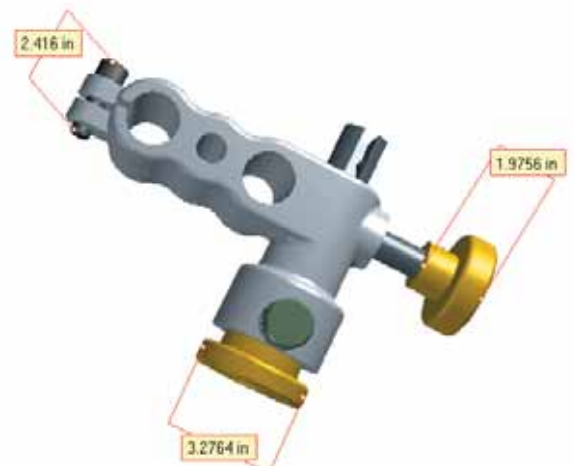
Adding a comment to a 3D model has never been easier. Similar to Annotation Callouts in 2D documents, attach 3D Callouts to a 3D model with an anchor line. Place callout text in any visible location in the document and move it at any time.

### Dimension 3D Models with Ease

Add dimension lines and values to your 3D models. Dimension lines are anchored to points on the measured surface. Place the dimension value anywhere on the document and easily move it if required.



Add dimensions to your 3D models



# Collaboration

## *Cooperatively review documents online*

ViewCafé's thin client architecture, combined with its intuitive tools, provides inherent collaborative capabilities that can be used by all members of a business and by business partners. Users can easily retrieve documents from a central file repository, complete a markup session and then replace the marked up document for others to review.

### **Simple Tools**

ViewCafé's tools are designed with the collaborative process in mind. In addition to intuitive and easy-to-use operation, ToolTip pop-up text appears as the cursor passes over tools, helping novice or infrequent users quickly determine functionality.

### **Platform-independent Functionality**

ViewCafé functions with standard Web-browsers, such as Microsoft Internet Explorer and Netscape Navigator. The ViewCafé Java applet automatically launches within the browser once a document is requested, giving the user an uninterrupted transition to ViewCafé. ViewCafé can also function as a standalone application, independent of a Web browser.

### **Interoperability With Other Spicer Products and Native Applications**

By default, markups are saved in XMS or in SVG. Both XMS and SVG can be read by Spicer Imagenation and Image a•X. SVG markups from Imagenation and Image a•X can also be opened in ViewCafé, for true interoperable functionality between Spicer products.

### **? What is XMS?**

XMS is an XML-based file format that Spicer uses to save ViewCafé's markup sessions. XML-based XMS files have several advantages since the files give integrators a great deal of flexibility in how file information is handled. For example, XMS files can be stored in XML-ready databases that can recognize the individual objects within the file. This means that although whole files are saved to a database, specialized XML parsers can sort and retrieve information from a database in any way the integrator wishes.

# Localization

## *Eliminate language barriers to document sharing*

Share and collaboratively review documents online with business partners from virtually anywhere in the world.

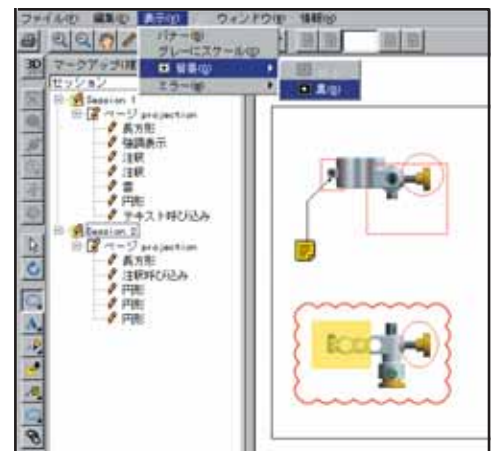
ViewCafé currently ships with 11 user interface languages. You can easily localize into the language of your choice with simple string translations. Languages shipped with ViewCafé include:

- Cantonese
- English
- Finnish
- French
- German
- Italian
- Japanese
- Korean
- Simplified Chinese
- Spanish
- Traditional Chinese (Mandarin)

For these languages, ViewCafé includes all the localized files you need; simply implement those that are required.

Administrators can use ViewCafé's API to create an interface in a single language or an interactive one that lets users select their preferred language and switch on the fly, without having to restart ViewCafé.

*ViewCafé user interface displayed in Japanese*



# Printing

## Full resolution printing

### ! A comparison of DPI

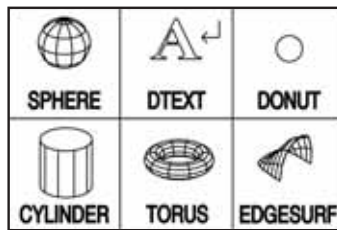
This Product Profile document is printed at a resolution of 300 dpi. The graphics below show identical images reproduced at 72 dpi and 300 dpi.

The results clearly demonstrate that low quality, 72 dpi prints are unacceptable for general use, especially for large format engineering documents or high resolution raster images.

ViewCafé enables accurate, full resolution printing to ensure documents are always printed clearly.



72 DPI



300 DPI

### ? Why are document banners so important for ISO compliance?

Document control is one of the largest causes of non-compliance with the ISO 9000 standard. ViewCafé's banner feature can be incorporated into a document control system to include a specific banner for each document. You define text — such as *Confidential*, *Draft Copy* or *Obsolete* — that is displayed on screen and printed with each document.

ViewCafé's Java technology enables the best platform-independent printing capabilities available in an online thin client application. ViewCafé prints documents at full size and full resolution, up to the maximum capabilities of the output printer.

The Print Setup dialog box offers many output options, including:



#### Quick Print:

Produce fast printing, draft quality documents. Quick Print will print 2D images at 200 dpi. 3D models print at one-quarter of the printer's full resolution.

#### Smart Print:

Print high quality documents quickly, and benefit from reduced network traffic to the printer. 2D documents print at 300 dpi; 3D models print at one-third of the printer's full resolution.

#### Full Print:

Print documents at full size and full resolution, up to the maximum capabilities of the printer.

In addition, ViewCafé offers many settings to customize output appearance and size.

#### Control Margins, Orientation and Paper Size

Set the page size, orientation and margins for your print job. Users can define custom sized paper for print jobs. Scale the document to fit on a selected page size or fit the document to either the page height or width. You can also print to a specific scale, from 25% to 200%.

#### Print What You See or Print the Entire Document

Print the entire page or just the area visible on the screen. Print all layers and markups or just those that are visible.

#### Select Color Output Options

Select "Color or grayscale" or "bilevel" to print the document at the desired color level.

#### Modify Banner and Highlight Appearances

Print banners with or without outlines (hollow glyphs) and define the width of the outline. Since some printer drivers have difficulty printing translucent objects, the solid outline improves the printing speed.

Print Highlights or translucent objects with a hatch pattern. This fills the object with a hatched pattern so that the object is no longer translucent. Some printer drivers have difficulty printing translucent objects, so removal of the translucent fill improves the printing speed.

#### Rasterize on Print

Reduce the time required to print sizable vector documents, such as large-format engineering drawings, by rasterizing when printing.

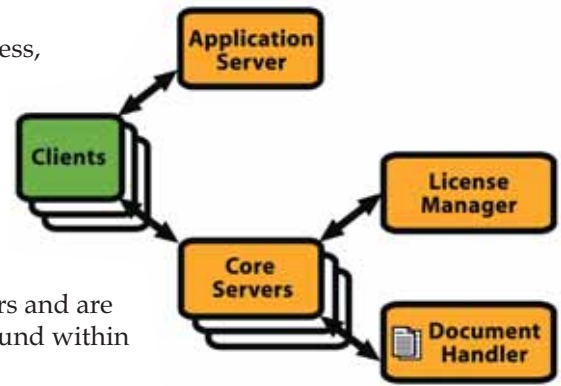
# Architecture

*So advanced, it's simple.*

To ensure that the system can always meet the needs of a growing business, ViewCafé uses client-server based, fully scalable Pure RMI or XML over HTTP architecture. Select the appropriate configuration for fast and robust performance through multiple firewalls, proxy servers, DMZs, or for your intranet application.

## Pure RMI Architecture

RMI provides the fastest communication between the client and server. It can be implemented when all clients have direct access to all the servers and are not restricted by firewalls or other security measures. This is typically found within an organization, where all users are behind the same corporate firewall.



RMI Architecture

## XML over HTTP Architecture

Complex networks pose no problem with XML over HTTP, the ideal solution for robust communication across multiple firewalls and proxies, and through DMZs. This architecture allows clients highly secure access to servers.

Regardless of which architecture you choose, the ViewCafé system contains several core components:

### Application Server

The Application Server receives requests from a Client applet and assigns a Core Server to convert the document data into a format that the Client applet can understand. With multiple Core Servers, the Application Server also provides load balancing to distribute the work among the servers and keep the ViewCafé system operating efficiently. Multiple Application Servers can be installed to provide redundancy.

### Core Server

Responsible for reading all of the file formats that ViewCafé supports, the Core Server converts the document data into a format that the Client applet can understand. As traffic increases, additional Core Servers can be added to share the workload and ensure optimum functionality.

### License Manager

The License Manager controls how many Clients can use the system at one time by keeping track of installed License Files. If no licenses are currently available when a user tries to open a document, the system will not allow access.

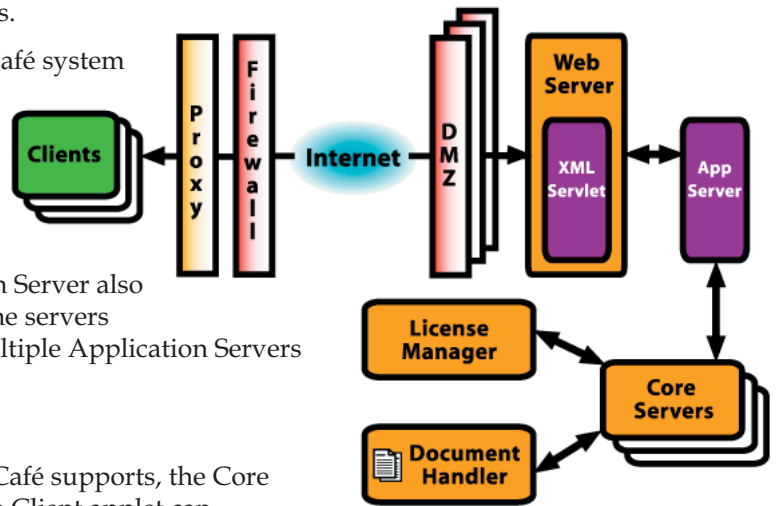
### Document Handler

Crucial for managing files and markups, the Document Handler:

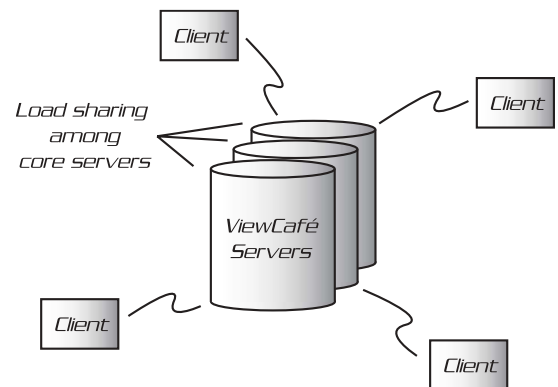
- determines the original and markup files required by the client for the session;
- ensures that those files are in a location accessible to the Core Server;
- manages client requests to add, update (replace) or delete markup files.

### Scalability and Load Sharing

ViewCafé has the capability to handle a virtually limitless number of users. As traffic increases, just add the appropriate number of Core Servers to handle the higher usage. Easily bring Core Servers online without the need to restart the entire application; users experience no interruption of service. As new users request documents, the Application Server will distribute the workload evenly among the servers, ensuring that all users benefit from optimum server response.



XML over HTTP Architecture



# Integration

## *Deploy Web-based solutions rapidly*

### **! Applets vs. Applications**

ViewCafé's Java architecture gives integrators the flexibility to deploy it as an applet which operates within a Web browser, or as a standalone application which operates independently of a Web browser. In all cases, ViewCafé's client-side components are 100% Java, making client operation completely platform-independent.

ViewCafé's architecture, based on HTML and Java, makes it inherently simple to integrate into Web-based document management solutions. The robust ThinSet API and the ThinSocket Classes allow integrators complete control over how the system is configured and deployed. Customize the user interface to suit your needs and your users.

### **Event Listener and User-Defined Actions**

Integrators who wish to embed the Client applet in a standalone desktop application instead of in a Web browser can implement an event listener to handle callback events from the applet. Integrators can create custom buttons or menu items in the ViewCafé user interface that send event information to the integration when activated. When a user-defined action is triggered, ViewCafé sends the event information to the integration through the NotifyCallback (for Client applets in browsers) or the ViewCafeEventListener interface (for Client applets in other applets or applications).



*ViewCafé Client running as a standalone application*

### **ThinSet API**

The ThinSet API is a client-side, rapid-development API that allows companies to write basic Web scripting code to load documents and markup layers. Integrators need only know how to create Web pages (however complex), and use the standard scripting languages (such as JavaScript or VBScript) to integrate ViewCafé.

### **ThinSocket Classes**

ThinSocket classes are Java classes that allow integrators a high degree of control over what the client sees. ThinSocket classes enable administrators to control file access and permission levels for users. This feature has the ability to limit the functions that are available for users. For example, a member of a review group may be able to view and edit all of the other group members' markups, while a different member may only be able to view markups but not edit any except for those that she created.

### **Completely Customizable**

ViewCafé's ThinSet API and ThinSocket classes provide a virtually limitless degree of customization. Administrators have complete control over the features and functions available to users. Each user is assigned a user profile, and once the user initializes the ViewCafé applet, only the functions enabled by the administrator are visible to the client.

For example, one user may be able to view a document, create markups and edit another user's markups, while another user may only be granted viewing and document navigation capabilities.



# Administration

## *Minimize system management tasks*

### Server-Triggered Client-side Administration

ViewCafé's server-based, thin client architecture virtually eliminates the need to administrate software installation on each user's machine. Instead, all ViewCafé software resides on the server. Users only require the Java runtime environment (JRE) on their machines to run ViewCafé as a standalone application or in a Web browser, such as Microsoft Internet Explorer or Netscape Navigator. To view 3D models, users must also add Java 3D. The one-time installation of the JRE and Java 3D can be automatically downloaded to the client if ViewCafé detects that they are required.

### Client Timeout

Configure ViewCafé to automatically end the markup session, or time out, when the application is inactive for a predetermined period of time. This ensures optimum use of licenses and that unattended machines do not pose a security risk.

### Usage Log Reports

ViewCafé is capable of generating reports for administrators that include event information such as client identification by machine name and IP address, connection and disconnection times, and license denials. Administrators can use this information to make decisions about license requirements and to optimize ViewCafé's performance for users.

## Security

### *Safe and secure access to files*

#### Secure Access

Documents are stored in a central file repository that is protected behind the corporate firewall. Only users that have permission from the administrator can access files from the repository.

#### Central Administration

ViewCafé's customizable API gives administrators complete control over user access levels and available functions when retrieving documents from the central file repository. Each user is assigned a profile that can be configured to grant or restrict any of ViewCafé's functions; some users may only be able to view documents, while others might be able to view, mark up and even alter other's markups.

#### Unique Markup File Format

Markup sessions from ViewCafé are saved back to the server in a standard format, SVG or XMS. Users can neither alter the original document, nor can they save the file in its native format. Integrators can configure ViewCafé to save markups to several native formats. See "Save Markups in Multiple Formats" on page 7 for details.

#### Banner Control

Configure ViewCafé to display documents with specific banners that the user cannot remove. Administrators can set required text such as Draft Copy, Confidential, and so on. Banners can also include predefined variables such as the file name, date, time, user name or page number. Banners can be set to display on screen and with each printed page. Banners can also be set inside or outside the document boundary.

#### ? How do I add Java 2 and Java 3D to my machine?

Your browser will prompt you to download the necessary Java components for ViewCafé.

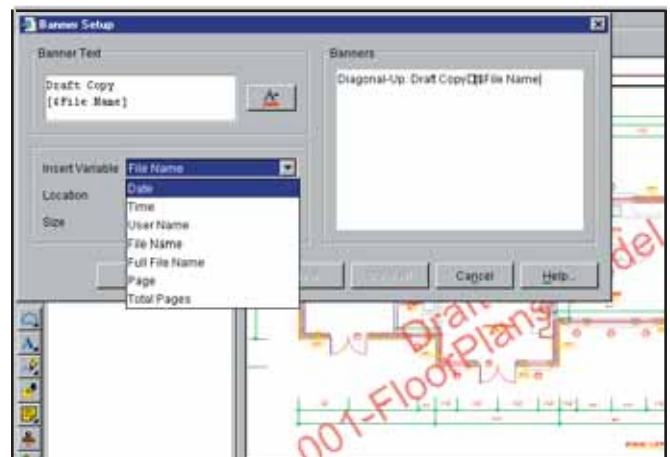
If your browser is not enabled with Java 2 or Java 3D, a dialog box will appear asking if you would like to install the required Java components.

The one-time installation can be configured to start automatically and will update as ViewCafé upgrades to future releases of Java.

#### ? How can I be sure my documents are safe when displayed over the Internet?

ViewCafé does not transfer files in their original format so viewers can't save copies or redistribute the files. Furthermore, administrators can disable printing functions if desired, and also add banners that will appear on the screen and on any printer output.

Markups are saved as separate XMS or SVG files, so the original is never altered.



# Licensing

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## *Flexible, customized applet management*

### **Concurrency**

ViewCafé Licenses have a 4 hour concurrency by default. Zero concurrency licenses are available. Please talk to your Spicer Sales Manager or your local Reseller for pricing and additional information.

Select the pricing model that best suits the needs of your business, clients and business partners from ViewCafé's flexible pricing options.

- **Fixed concurrent licensing** lets users purchase a specific number of licenses. To increase viewing and markup capabilities, administrators merely purchase additional licenses to fulfill the need.
- **Enterprise licensing** enables administrators to ensure that demand for ViewCafé services are always met. This pricing model lets the service provider offer ViewCafé services to an unlimited number of users. Solution providers can negotiate the terms to licensing ViewCafé from Spicer Corporation and then bundle ViewCafé into any solution.
- **OEM licensing** gives OEM solution providers the ability to create custom-branded applications for their clients. The OEM pricing model lets the solution provider negotiate the terms of licensing ViewCafé from Spicer Corporation, allowing the OEM to bundle ViewCafé into any solution.

### **Client and Server License Files**

A Standard Client license allows the user to open rasters, EDT, and text formats. A Technical Client license is required for functionality not covered with the Standard license (AutoCAD drawings, for example). Numbers of Standard and Technical licenses do not need to match; for example, you may have fewer Technical licenses. Multiple Clients on the same machine will share a license.

A Basic Server license enables 2D formats and 3D neutral formats (STL, VRML, SolidWorks, and IGES, for example). A 3D+ Server license enables access to 3D native formats (SAT, ProE, STEP, Catia, VDAFS and JT, for example). Numbers of Basic and 3D+ licenses must match to prevent environments where different servers have different functionality levels. Multiple servers on a single processor will share a license.

## Customer Service and Support

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### *Make the most of your investment*

### **Explore a wealth of information at [www.spicer.com](http://www.spicer.com).**

Spicer's Web site is a universal destination for image viewing solutions.

- Learn about the Power of Universal Viewing.
- Download evaluation software and try interactive online demos.
- Find information on Spicer's Partner program for Resellers, VARs and OEMs.
- Get details on Spicer events - see us live at a trade show near you.
- Read Spicer news and facts - learn about Spicer success stories and noteworthy news.

Spicer's team of Customer Support specialists and training instructors provide front-line assistance and timely education, increasing the value and ease-of-use of Spicer products in your business enterprise.

### **Maintenance**

Spicer's comprehensive Maintenance Program, which includes service and support, annual General Maintenance Upgrade (where applicable), and interim releases, is available for purchase. For details, contact your Spicer Sales representative, visit the Spicer Web site at [www.spicer.com](http://www.spicer.com), or e-mail [maintenance@spicer.com](mailto:maintenance@spicer.com).

### **Training**

Learn how to make the most of your investment with a customized training course offered by highly trained Spicer instructors. We offer training at your location and our facilities in Kitchener, Ontario, Canada.

### **Documentation**

Receive award-winning documentation for ViewCafé and its Application Programming Interface (API).

Find out more on the Web at [www.spicer.com](http://www.spicer.com).

# Frequently Asked Questions

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## *Important tips and facts*

### **1. Do I have to do anything to enable 3D model viewing?**

Running a 3D-enabled Client applet requires both the Java Runtime Environment (JRE) and Java 3D. Generally, these 2 plug-ins are downloaded and installed the first time you run the applet. In addition, appropriate Licenses must be available for the Client. Opening 3D or engineering documents requires a “Technical” Client License. A “3D+” Server License is also required if you want to view SAT, ProE, STEP, Catia, VDAFS and JT formats.

### **2. How large is the ViewCafé Java applet?**

The ViewCafé applet size depends on which JAR files you are using. For standard 2D or office document functionality, you require the ViewCafe.jar file; thus the standard applet is approximately 1.2MB. To enable 3D capability in the applet, you need the ViewCafe3D.jar file, so the 3D-enabled applet size is approximately 1.4MB.

You can automatically save the applet in a plug-in cache on the client’s machine, rather than in the temporary browser cache. Following the initial download, ViewCafé simply verifies with the server that the client has the most recent applet and then proceeds to launch the applet from the client’s cache. ViewCafe will only download the applet again to the client machine if it has been updated on the server.

### **3. Do I have to install the ViewCafé server components on the same server as the document management system?**

No. It is not necessary to have server components reside on the same server as the document/ data management system’s file repository. ViewCafé is Web-based so it has the capability to cross multiple firewalls and proxy servers to access and display documents from any file repository that is connected to the Web or a network.

### **4. How many clients can I simultaneously support with ViewCafé?**

In theory, the number is limitless. ViewCafé’s architecture allows for additional Core Servers to be added at any time as usage increases. Each Core Server can typically support between 50 and 200 Clients. The Application Server will evenly distribute the workload among all the Core Servers, thereby ensuring that all users have optimum server response. You can monitor the Server Status page to help determine if you need additional Core Servers.

### **5. What is Spicer’s standards-based approach for Web development?**

Many organizations around the world are adopting leading Web technologies into their Web-based document/ data management solutions and are actively participating in the development of these technologies. This ensures that the technologies evolve in a way that lets users create interoperable applications that can easily exchange information among business partners. Spicer Corporation carefully monitors these technology trends and implements those Web-based technologies that are widely accepted and have open standards, which can be adopted by anyone who wishes to use those technologies. This strategy ensures that businesses using ViewCafé are ideally positioned to grow with enhancements to these standardized technologies and can easily integrate ViewCafé with their own systems and those of their business partners.

### **6. Is ViewCafé limited to operating only within a Web browser?**

Not at all. ViewCafé can also be deployed as a standalone application that will operate outside of a Web browser. For more information about using ViewCafé in this manner, please contact Spicer Customer Support at 519.748.2462.

 The World Wide Web Consortium (W3C) was created to lead the World Wide Web to its full potential by developing common protocols that promote its evolution and ensure its interoperability. It is made up of over 500 member organizations such as vendors of technology products and services, content providers, corporate users, research laboratories, standards bodies, and governments. W3C contributes to the efforts to standardize Web technologies and has made recommendations for such Web technologies as XML, HTTP, and SVG. Learn more about W3C at [www.w3.org](http://www.w3.org).

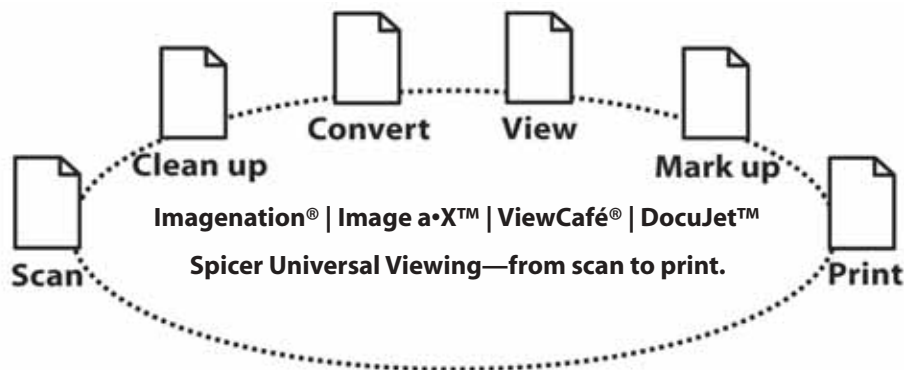
### **More questions?**

For the answers to any of your questions about ViewCafé, contact us at your convenience by telephone at 519.748.2462 or by e-mail at [info@spicer.com](mailto:info@spicer.com).

# The Power of Universal Viewing

*Spicer, at every step of the document lifecycle.*

The team of Imagenation, Image a•X, ViewCafé, and DocuJet offers the power of universal viewing to all employees, partners and clients. Whether an organization simply needs to view documents stored in a local database, or collaboratively review plans for a mega-project with business partners that are scattered throughout the world, Spicer products provide the means to do it.



Spicer Universal Viewers have the capability to quickly and accurately view and print hundreds of industry-standard file formats. Moreover, markups made in one Spicer application can be saved and displayed in any other Spicer visualization product.

This interoperability among Spicer products assures businesses that files which are viewed or marked up at one location can be opened and read by Spicer users at any other location regardless of whether employees are using the Spicer desktop, Web, or ActiveX implementation.

From beginning to end of the document lifecycle, Spicer Imagenation, Image a•X, ViewCafé, and DocuJet can help you access, share, and communicate the information you and your business partners require.

Spicer Universal Viewing solutions for the enterprise are available for all client and server configurations on Windows, Linux and Macintosh.

Download FREE evaluation software today from [www.SPICER.com](http://www.SPICER.com).

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## ViewCafé System Requirements

The ViewCafé Server and Client components have different recommended minimum system requirements.

### Server:

**Operating System:** Windows 2000, Windows 2003 Server, Windows XP, Red Hat Linux 7.2

**Processor:** Pentium II 500 MHz (Pentium III recommended).

**Hard Drive:** 130 MB for installation. 50 MB or more for temporary files.

**RAM:** 256 MB or more.

### Client:

**Browser:** Microsoft Internet Explorer 4.0 or later; Netscape Navigator 4.5 or later.

**Processor:** Pentium 200 MHz, or better.

**Operating System:** Windows 98/ME, Windows 2000, Windows XP, Sun Solaris 2.6 or later, Linux, AIX, HP-UX, Mac OS X

**Hard Drive:** 25 MB free disk space.

**RAM:** 64 MB or more (128 MB recommended for optimum 3D performance).

**Video Card:** Open GL accelerated video card with most recent driver recommended for optimum 3D performance.

**Display Settings:** 16-bit color, 24-bit recommended for optimum 3D performance