

mathcad

MATHCAD APPLICATION SERVER

Create and distribute Mathcad worksheets via the Web

PRODUCT OVERVIEW

The Mathcad Application Server is Web-based server software that creates and distributes Mathcad worksheets in HTML, allowing anyone to have secure “any time, anywhere” access to Mathcad content via a standard Web browser.

Because the Mathcad Application Server is a Web-based application, Mathcad worksheets can be distributed to a broad audience—including contractors, consultants, partners or clients—with minimal effort and low IT management. Design engineers can easily create Mathcad content for Web deployment without needing any knowledge of HTML or other Web-based programming languages. Likewise, their audience (whether high-level decision makers or field engineers) can read and interact with the materials without needing to download any special plug-in.

Mathcad Application Server supports all built-in math functionality, including graphical output of results for the creation of Mathcad-based Web pages, which can then be saved and reused in multiple engineering projects.

Using a standard Internet Web browser, users can view and interact with Mathcad documents through HTML form fields, rather than the Mathcad live document editor—removing any requirements for either learning Mathcad or installing Mathcad on client systems. The Mathcad Application Server is not a substitute for the full power and interactivity of Mathcad, but rather a means to harness the power of Mathcad through a standard browser interface. Author-defined Web controls include text fields, list boxes, check boxes, radio buttons, and “recalculate” buttons.

The Mathcad Application Server gives users the ability to recalculate Mathcad worksheets with different parameters. During a user session, previously authored Mathcad documents, which are hosted on a Microsoft Web server, are calculated and delivered to the user’s browser. The user fills in the HTML form fields to define designated input parameters, and then the request is sent to the Web server. The server recalculates the worksheet and updates the Web page with the new results. Users are free to recalculate Mathcad documents an unlimited number of times in a single browser session.

BENCHMARKS

- Supports up to 90 worksheet transactions per minute
- Offers up to 30 simultaneous browser sessions at a time, per processor

USAGE EXAMPLES

- Performing iterative calculations using different inputs in “what if” scenarios
- Reusing standard calculations in multiple projects
- Enabling calculations for the inexperienced Mathcad user
- Building specialized Web sites with customized calculations

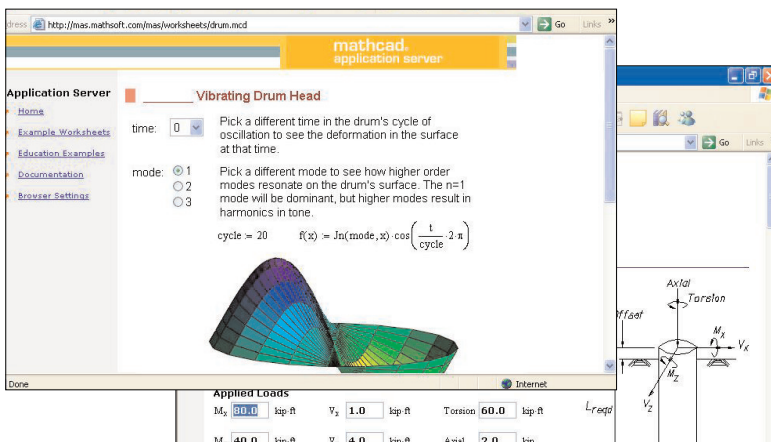


Figure 1. Mathcad Application Server supports all built-in math functionality, including graphical output of results.

- Distributing Mathcad worksheets with user-access restrictions to the underlying calculations or formulas
- Distributing contracted work to clients in an understandable and recalculable format
- Enabling field engineers to get quick access to solutions from anywhere
- Deploying interactive problems for Web-based learning

BENEFITS

- Organizations can deploy and distribute interactive Mathcad documents across an entire company, university, extranet, or public Web site for widespread but protected use.
- Little to no experience with Mathcad is required for end-user interaction with the Mathcad Application Server. The only knowledge required is a basic understanding of how to use an Internet Web browser and form field elements, such as text boxes, list boxes, and buttons.
- With minimal system requirements on client machines, this software server-based solution eliminates the overhead of maintaining many desktop systems.
- No experience with server-side scripting or HTML coding is required to generate and deploy complex, Web-based math applications.
- IT managers and administrators have full control over security and access because the Mathcad Application Server is built on top of Internet Information Services (IIS).



With 20 years of experience, Mathsoft Engineering & Education, Inc. provides comprehensive solutions that streamline the engineering process in a way that can be documented, verified and reused, enabling engineering and product innovation.

www.mathsoft.com

SPECIFICATIONS

Server Hardware Requirements

- 800 MHz processor (1 Ghz recommended)
- 512+ MB memory
- 550 MB of hard disk space (250 MB for MAS, 100 MB for prerequisites, 200 MB temporary space during installation)

Server Software Requirements

- Windows® 2000 Server or Windows 2003 Server
- IIS 5.0 or higher

The following requirements are available on the MAS CD:

- Microsoft .NET Framework® 1.1
- Microsoft DirectX 9 for multimedia rendering of graphics
- MSXML 4.0 SP2 or later
- Microsoft Data Access Components 2.6 or later
- Internet Explorer 6.0
- Adobe Acrobat Reader 7.0

Client Requirements

- Internet Explorer 5 or above, Netscape 6, or Mozilla 6 [Note: other HTML 4.01 compliant browsers may work]

Authoring Requirements

- Mathcad 11.2a or above (Mathcad 13 recommended)

Restrictions

- Cannot deploy worksheets containing third-party application components, such as Microsoft® Excel, Intergraph SmartSketch®, etc.
- Cannot enter data into input tables or scroll data tables
- Cannot interact with plots except through variable definitions
- Cannot animate regions
- Cannot edit math expressions or create new regions

HEADQUARTERS DENMARK OFFICE GERMANY OFFICE ITALY OFFICE JAPAN OFFICE

{North & South America}
101 Main Street
Cambridge, MA
02142-1521
USA
T 617-444-8000
F 617-444-8001
sales-info@mathsoft.com

{Denmark and Sweden}
Postboks 86
DK-2920 Charlottenlund,
Denmark
T +45-39451205
F +45-39451209
denmark@mathsoft.com

{Germany and Austria}
Steinstrasse 56
81667 München
Germany
T +49 (0) 89 666 103-0
F +49 (0) 89 666 103-13
germany@mathsoft.com

Via Ampezzo, 2
20156 Milano
Italy
T +39 02 38004765
F +39 02 38004765
italy@mathsoft.com

{Japan, Korea & China}
Burex Kojimachi
3-5-2 Kojimachi, Chiyoda-ku
Tokyo 102-0083 Japan
T +81-3-3515-2471
F +81-3-5211-5325
jpn-info@mathsoft.com

NETHERLANDS OFFICE UK OFFICE

{Benelux}
Rotterdamseweg 183C
2629 HD Delft
Netherlands
T +31 15 268 2640
F +31 15 268 2629
netherlands@mathsoft.com

{all other locations}
Knightway House
Park Street
Bagshot, Surrey
GU19 5AQ
United Kingdom
T +44(0) 1276 450850
F +44(0) 1276 475552
sales-info@mathsoft.co.uk