TEIGHA® DRAWINGS

The leader in advanced .dwg technology

www.opendesign.com

BACKGROUND

Teigha Drawings is a stand-alone independent SDK available for developers working with the .dwg, .dxf, and .dgn file formats. It was developed by Open Design Alliance (ODA), a technology consortium that has been providing interoperability tools for the engineering software industry since 1998.

BUSINESS OVERVIEW

INTRODUCTION

ODA has a long history of experience with the .dwg file format, dating back to 1998. Our software has kept the .dwg file format open and universally accessible for the past 20 years. Today, in addition to providing interoperability, we are leveraging our vast experience with .dwg to make it a tool of choice for modern application development.

INDUSTRY-PROVEN TECHNOLOGY

Teigha Drawings has been powering thousands of mission critical engineering applications for more than a decade. It is a mature, high-quality and trusted solution for building CAD applications.

ACCELERATE TIME-TO-MARKET

In addition to turn-key support for .dwg and .dgn files, Teigha Drawings includes components for a variety of other common engineering tasks including version control, visualization and publishing. Using Teigha Drawings as a base, you can build more sophisticated applications in less time, using fewer resources.

ATTRACTIVE LICENSING

Teigha Drawings is offered under a fixed fee license with no royalties for cost-effective deployment.

PRODUCT PORTFOLIO

SUPPORTED FILE VERSIONS

- ‣ .dwg/.dxf – Read R9 through 2018, write R12 through 2018
- ‣ .dgn – Read and write V7 and V8

PLATFORM AND LANGUAGES

- ‣ Implemented in object-oriented C++
- ‣ Available for all popular compilers on Windows, Linux and Mac
- ‣ API wrappers available for .NET and Java

DATABASE INTEROPERABILITY

- ‣ Access the full contents of a .dwg or .dgn file
- ‣ 100% data retention during round-tripping
- ‣ Convenient APIs for creating any type of standard .dwg or .dgn object

CUSTOM DATABASE OBJECTS

Create smart custom objects that interact with Teigha-based applications through standard interfaces (serialization, visualization, etc.)

OPTIONAL 3D SOLID MODELING

- ‣ Full support for Boolean operations between solids
- ‣ Create and edit 3D solids

IMPORT AND EXPORT

- ‣ Import from .dwf or Collada
- ‣ Export to .pdf, .svg, .dwf, Collada, HOOPS or .bmp

ADVANCED FEATURES FOR .DWG

- ‣ Version control and multi-user editing
- ‣ Digital signatures
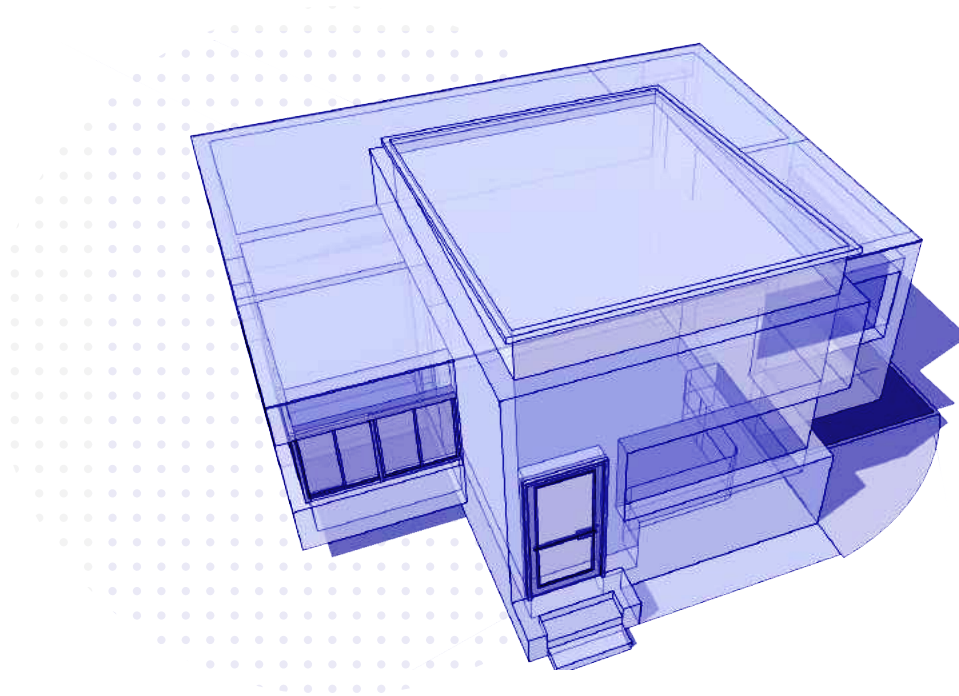
PROFESSIONAL RENDERING

PERFORMANCE

Teigha Drawing makes use of spatial filtering and other performance enhancing techniques to provide fast rendering of .dwg and .dgn data

STANDARD RENDERING FEATURES

- ‣ Render modes including wireframe, HLR, shaded, etc.
- ‣ Lineweights and linestyles
- ‣ Materials
- ‣ Zoom, pan, 3d rotation and other navigation features
- ‣ Entity selection and query

VISUAL STYLES

Customize your rendering of silhouettes, obscured (hidden) edges, "always on top" edges, transparency and more

APPLICATIONS

Professional visualization on any platform, including cloud

Import and export .dwg and .dgn data with full fidelity

VISUALIZATION

INTEROPERABILITY

DRAWINGS

PUBLISHING

CAD EDITING

Publish models to 2D or 3D PDF

Extensive customization options available

Full CAD editing

Markup editing

Optional 3D solid modeling

A SOLID FOUNDATION FOR THE FUTURE

The .dwg format was developed in the late 1970's and first saw widespread use in the 1980's as the native file format of Autodesk® AutoCAD®. Today, the widespread availability of Teigha Drawings has allowed .dwg to become the standard exchange format for CAD. Teigha Drawings is also the driving force behind a new generation of non-Autodesk® CAD applications that use .dwg as their native file format.

While cloud computing and increasingly large data sets are putting new demands on engineering design applications, .dwg is a well-architected and extensible format that remains well-positioned to meet these demands. At Open Design, we are committed to the ongoing growth and improvement of .dwg, not only as a legacy format, but as a key component of modern engineering design applications.

Our development of version control for .dwg resolves a long-standing deficiency of the format, and it also provides safe and robust support for multi-user editing. This new technology makes .dwg ideal for cloud computing, and it underscores the ongoing commitment of Open Design to keep the .dwg format up-to-date and viable for modern application development. For more information about Teigha Revision Control for .dwg, see our white paper on www.opendesign.com.

OPEN DESIGN: A BETTER BUSINESS MODEL

As a non-profit technology consortium, our primary responsibility at Open Design is to develop great software for our members. We have no owners or shareholders who are looking to make money from our products, so we are able to invest more than 75% of our revenue into R&D. As our revenue has grown during recent years, we have added significant value to the Teigha platform through new products and features, without increasing our annual membership fees. An ODA membership represents a singular value in today's engineering software market.

More information about Teigha products
www.opendesign.com
More information about ODA
www.opendesign.com/about