TECHSOFT3D

COMPANY
Canvas GFX

LOCATION
Boston, Massachusetts, USA

SOFTWARE
Canvas X³

SOFTWARE DEVELOPMENT KITS
HOOPS Platform

COMPANY WEBSITE
canvasgfx.com

"There was such a close alignment between our company and Tech Soft 3D in terms of functionality, road map, and customer base. As the Canvas solution evolves, we know we have the right partner supporting that evolution."

- **Mike Hibberd, VP of Marketing, Canvas GFX**
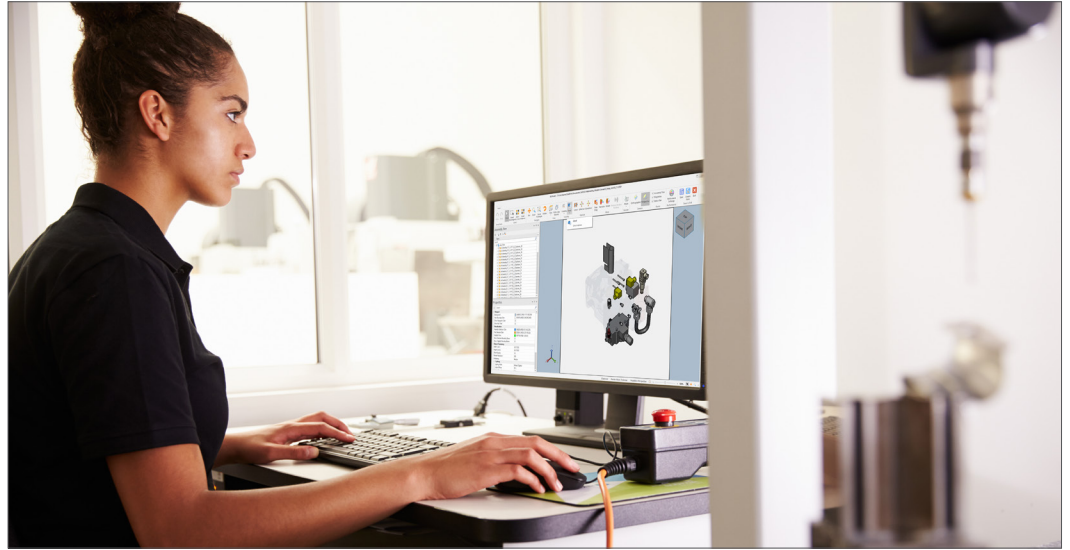
Tech Soft 3D partner success story: Canvas GFX

Canvas GFX Leverages HOOPS Platform to Develop New 3D Product that Simplifies Technical Illustration Workflows

The Challenge

Canvas GFX's mission is to advance the way its customers in the aerospace, defense, and manufacturing industries communicate complex information. The company's core technical illustration software platform, Canvas X, has long delivered a powerful array of functionality to assist with illustration and documentation workflows for customers creating instruction manuals, maintenance manuals, and other important documentation.

"Our software is for organizations that need to visualize complex ideas with precision and clarity, so that people don't make expensive mistakes when they are building or maintaining complex items," explained Mike Hibberd, VP of Marketing, Canvas GFX. "This could be anything from creating the wiring diagram for a satellite, to instructions on how to retrofit a decades-old airplane with new parts. When your audience depends on pinpoint accuracy and minute detail, you need
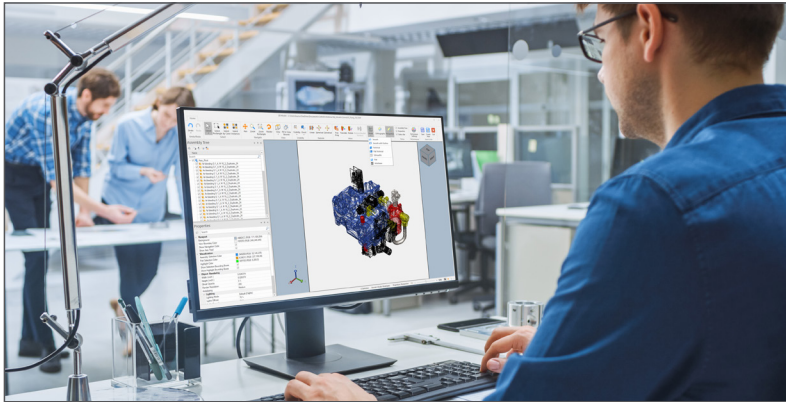
illustration software that really gets the point across."

While customers had long enjoyed the ability to import a wide array of file types – including many 2D CAD formats – into Canvas, they had an increasing interest in working with actual 3D models.

"The pain point we heard people describing was that every time they wanted a 3D view of a product to include in a piece of technical documentation, they'd have to go back to the CAD engineers to capture an image," said Hibberd. "There'd be three or four people standing around a screen giving the CAD engineer directions about the specific view they wanted. They'd take a screenshot of it, export it as a PDF, and then have to import it into Canvas. We wanted to streamline and simplify that process."

canvasx³

A New Offering with Powerful 3D Capabilities

To respond to what it was hearing from its customers, Canvas GFX developed Canvas X³, which represents a huge leap in functionality for the Canvas product line. Notably, it includes the ability to easily import and work with 3D CAD models.

"Canvas X³ allows customers to bring in a 3D CAD file in its raw form, with all of the part data," said Hibberd. "Users can explode the assembly, rotate it, and otherwise manipulate the parts however they want. In this way, Canvas X³ makes it easy for people to create whatever view they need for the documentation they're creating. Users can take and retake the shot as many times as they want, all without having to involve a CAD engineer. In essence, Canvas X³ democratizes access to 3D data within the organization."

HOOPS Platform – a collection of powerful software development kits (SDKs) – was instrumental in the development of Canvas X³. The platform includes HOOPS Exchange, the leading CAD translation SDK, which provides all the integration controls a development team requires to easily build robust CAD data translation into an application.

Additionally, the platform contains the HOOPS Visualize SDK, a powerful 3D engine to rapidly render stunning graphics across desktop and mobile platforms, and the HOOPS Publish SDK, which enables applications to publish 3D data in a number of different ways for downstream consumption.

For Canvas GFX, partnering with Tech Soft 3D made sense on several different levels.

"There was such a close alignment between our company and Tech Soft 3D in terms of functionality, road map, and customer base," said Hibberd. "As the Canvas solution evolves, we know we have the right partner supporting that evolution."

Hibberd added, "We often talk about technical illustration software in terms of visual communication, but really, it's about driving measurable, tangible efficiencies in key workflows – and Tech Soft 3D is helping us make that happen."

Industry:

- Aerospace & Defense; Manufacturing

Challenge:

- Existing technical illustration product could import 2D file formats but not 3D

- Customers wanted an easy way to incorporate 3D models into their workflows, rather than having to request model views from the engineering department

- Company saw opportunity to meet the needs of the market with new product offering

Solution:

- HOOPS Platform powers applications with proven 3D technologies, including high performance 3D graphics, accurate and fast CAD data access, and 3D data publishing

Results:

- Bring powerful new product to market with ability to import and access data in over 90 file formats, including files created in all leading 3D CAD packages

- Democratize access to data and simplify workflows, enabling users to easily visualize, rotate, and manipulate 3D models on their own to get the views they want

- Empower customers to create powerfully precise visual documentation, helping company maintain leadership position in technical illustration software space