“I’m a small developer. It’s not like we have a huge team of people. The fact that AutoCAD OEM gives us that solid platform to build on means that we spend 100% of our time on the value that the FireCAD add-in brings and the features that fire alarm customers tell us they want rather than spending time and resources reinventing a platform to do these drawings.”

– Anthony Conte, President, Cadgen Software

The Challenge

Cadgen Software was founded to fill the void in reliable CAD automation tools for the fire and security industry.

“Fire alarm companies need to create very detailed drawings when they’re designing a commercial fire alarm system for a new building,” explained Anthony Conte, President of Cadgen Software. “Everything from the placement of the various sensors, strobes, and horns, to the circuits that connect all those components needs to be carefully documented. Unfortunately, producing those drawings has historically been a very manual, repetitive, and time-consuming task.”

Drawing upon his software background and his experience in the fire alarm industry, Conte developed an add-in to AutoCAD that could eliminate many of the time-consuming aspects of producing fire alarm system drawings, reducing design time by half. It was a compelling enough utility that he sought to commercialize it – but there was a choice to make in how to deliver it to the market.

“I wanted to sell it as a full product rather than as an add-in,” said Conte. “When I found out about AutoCAD OEM it was a lifesaver – it was the perfect way to bundle the add-in I had developed together with AutoCAD. It was exactly what I was looking for.”

A Powerful Platform with a Familiar Interface

The AutoCAD OEM platform provides a full version of AutoCAD for building a custom application, using the world’s most proven CAD system as a starting point. To make it their own, developers simply “hide” any unneeded AutoCAD functionality and add their unique value by adding their plug-in, providing customized functionality catered to facilitating specific market tasks.
Cadgen was able to port its niche product FireCAD in less than a week. “It was basically two days of effort on my end,” said Conte. “The whole process was pretty seamless.”

Besides speeding development, using AutoCAD OEM as the foundation for FireCAD was a logical choice given the target market.

“When everyone in the fire alarm industry already uses AutoCAD to do their drawings,” explained Conte. “Many projects that our customers work on – especially the government jobs – require drawings to be submitted in DWG format, so this ticks that box for them.”

At the same time, the AutoCAD foundation provides a familiar interface and quick ramp-up for customers.

“Most of my customers who get started with FireCAD say ‘Wow, this is really easy – I already know how to do most of the basic operations’ because of their prior experience with AutoCAD,” said Conte. “They can even draw upon their existing DWG templates, title blocks, and drawing standards, which is a big productivity booster.”

As a reliable and proven platform, AutoCAD OEM also enables as wide an array of customers as possible to take advantage of FireCAD, regardless of what kind of hardware they have.

“As long as customers have some minimum machine requirements, we know that they’re going to have a very smooth experience with the product,” said Conte. “They don’t need an $8,000 workstation to run it. That’s a huge selling point because a lot of my customers might be one-person shops operating out of their home or office with their own computer.”

For all the benefits to the end user, AutoCAD OEM also provides significant benefits to Cadgen Software as the ISV.

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Conte continued, “I know I’ve got some competitors out there that have their own CAD engine, and we have a clear edge over them precisely because we don’t have a team of developers trying to recreate what AutoCAD does.”

Cadgen’s success using AutoCAD OEM for FireCAD has led them to take a similar approach for the development of a new security system design automation product.

“We’ve developed a database of parts related to security and access control systems, and we can leverage the same code base as FireCAD to develop a product specifically for the security market,” said Conte. “That’s the great thing about AutoCAD OEM: It makes it very easy for us to plan our next move and expand our product line, so that we can serve an even bigger portion of the fire and security system market.”

## Industry:
- Fire and Security

## Challenge:
- Commercial fire alarm system customers were spending too much time creating drawings and needed a way to eliminate manual and repetitive drawing tasks
- Many fire alarm projects, including government jobs, required DWG for deliverables
- ISV with small development team wanted to address these challenges with a full product rather than a plug-in

## Solution:
- AutoCAD OEM allows developers to create a niche product using the world’s most proven CAD system as a starting point

## Results:
- Combine plug-in with AutoCAD OEM to create a full product in less than a week
- Help fire alarm system customers reduce design time by half
- Provide familiar AutoCAD interface to end users, providing quick ramp up
- Dedicate resources to industryspecific features and value-adds rather than CAD engine development, ensuring competitive edge over other players in the market