



# BULLSEYE

In a shootout with a Dell workstation, Enfinity Engineering's Richard Howard becomes a BOXX champion  
*By John Vondrak*

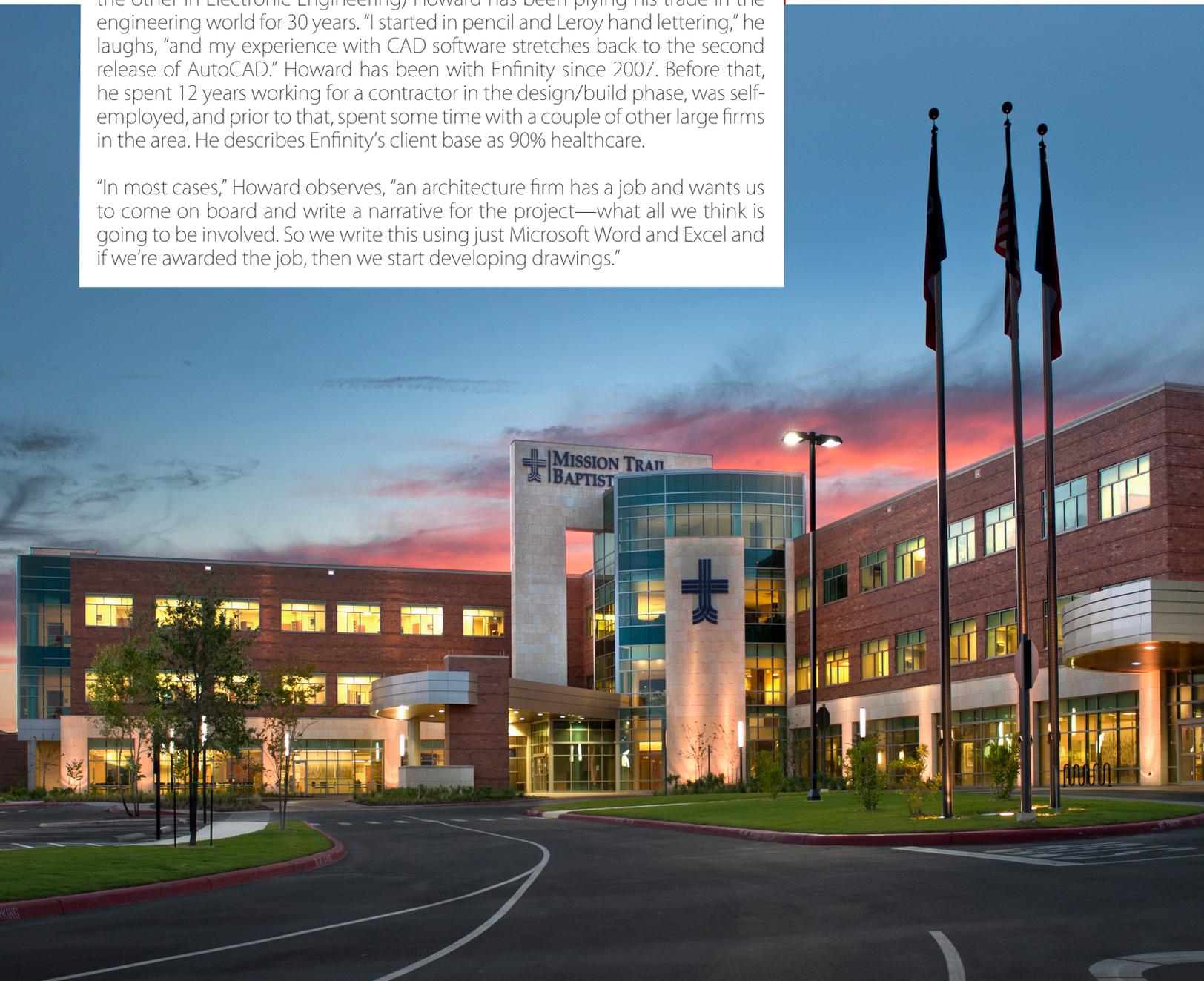
Even though he's not actually employed by the manufacturer, Richard Howard considers himself a salesman for the Bowfinger Medusa Drop Away arrow rest—so much so that he's happy to tell anyone within earshot about how it is such an outstanding product. If you're unfamiliar with this unique device which attaches to a hunter's bow, it's likely because you're not a competitive archer like Howard. He relies on the Medusa to help him hit the bullseye. Richard also considers himself a salesman for BOXX Technologies, and even though he doesn't receive a paycheck from them either, he is convinced that his BOXX APEXX 2 workstation helps him hit critical deadlines as the senior electrical designer for Enfinity Engineering.



Located just 22 miles from Kingston Springs, Tennessee (where incidentally, the Medusa arrow rest is manufactured) Enfinity Engineering makes its home in Brentwood, just south of Nashville. While they spend a good deal of their time designing healthcare facilities, Enfinity has also done a number of high profile commercial projects including Ensworth High School's state-of-the-art, 56,000 sq. ft. natatorium. Enfinity was founded on the concept of joining exceptional design with real-life construction practices in order to create buildings that truly serve those who inhabit them. Its principals have over 100 years of MP&E design and construction experience and the firm places considerable emphasis on their construction experience noting that design that fails to consider constructability and maintenance will face significant issues either during construction or once the building is completed. Enfinity also stresses that people are the focus of their design and construction process and that their engineers are excellent communicators with great relational skills. That's obvious though, if you spend any time speaking with Richard Howard. The affable and bluntly honest electrical designer seems as comfortable talking about engineering, Autodesk Revit, and his new BOXX workstation, as he would pulling back on the bow string and letting an arrow fly.

Along with earning two associates degrees (one in Computer Technology and the other in Electronic Engineering) Howard has been plying his trade in the engineering world for 30 years. "I started in pencil and Leroy hand lettering," he laughs, "and my experience with CAD software stretches back to the second release of AutoCAD." Howard has been with Enfinity since 2007. Before that, he spent 12 years working for a contractor in the design/build phase, was self-employed, and prior to that, spent some time with a couple of other large firms in the area. He describes Enfinity's client base as 90% healthcare.

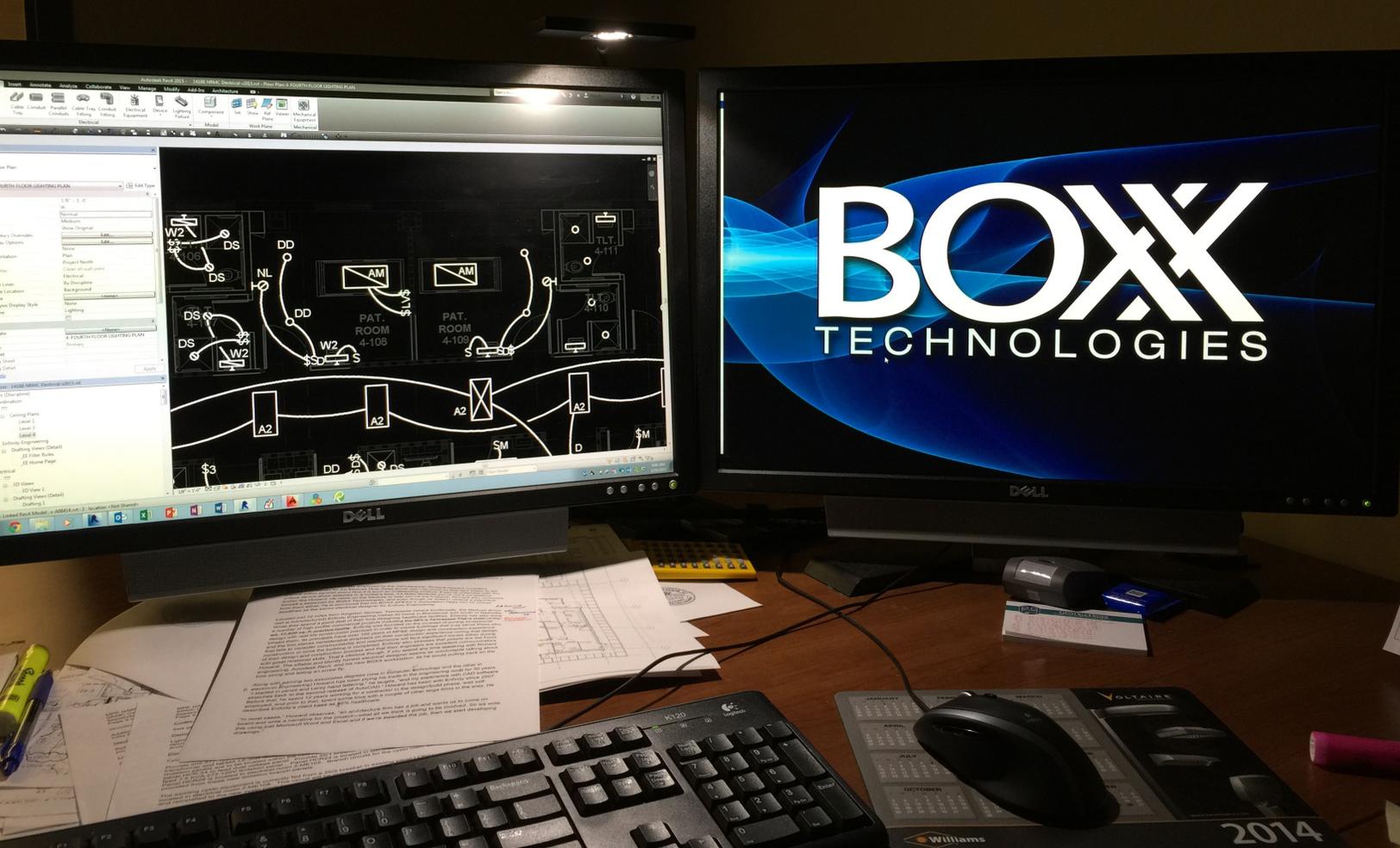
"In most cases," Howard observes, "an architecture firm has a job and wants us to come on board and write a narrative for the project—what all we think is going to be involved. So we write this using just Microsoft Word and Excel and if we're awarded the job, then we start developing drawings."



Recalling that he has worked with AutoCAD since “we just had the green screen,” Howard continues to use the software application along with Revit, which Enfinity adopted in 2010. Howard admits though, that for the first few years, Revit wasn’t exactly smooth sailing for electrical design. “It was a combination of computers running so slow, the program being so big, and Revit not being very nice to MP&E way back then,” he says. “Because Revit is an architectural program, they started with the architecture core and developed that along.” He remembers that in those early versions, there were features like receptacles and some ductwork, but that they almost seemed like an afterthought. He just couldn’t get it to do what he wanted it to. Fast forward five years and Howard believes that the application has made some serious strides. “They have done a pretty good job developing it over the last 5 years to make it user friendly to electrical, mechanical, and plumbing,” he says, “but there is still a ways to go before its perfect.” When I ask Howard what he would like to see Autodesk do to improve Revit, his response is direct, revealing that he has obviously spent ample time with the program.

“It needs to offer the flexibility to design differently from the out-of-the-box way Revit tells you. The big thing is the interactions of your loads and panel schedules and how you can relate and insert loads into those panel schedules. Revit is created so that everybody works in the same model, but putting blank loads into a panel schedule is not easy—almost impossible. There needs to be more flexibility.” Despite his Revit electrical critiques, Howard admits that the application is great for architects, becoming the industry standard and prompting Enfinity to adopt the popular application in the first place. He viewed this as a simple case of getting onboard or getting left behind. “Last year, we even had clients say they were only working in Revit, so if you wanted to work with them, you had to be using it as well,” he reveals. “Architecture is driving the train. They can draw lines, pop in windows, doors, and more and all that is seamless for them.”





### **“WHAT DO YOU THINK?”**

After awhile, our discussion shifts from software to hardware. Howard says that as a result of BOXX product emails reaching Enfinity principals, the firm’s chief operating partner forwarded one to him along with a simple question: “What do you think?” As the firm’s unofficial Revit go-to-guy, the question wasn’t anything out of the ordinary. “He wanted to know what I thought about using it for Revit and wanted me to check into it,” Howard recalls, “so I got online, looked at the website, and found it pretty interesting. But my kneejerk reaction was that it was way too expensive for what we wanted to do.” Howard didn’t abandon his research though, and actually wound up chatting online with BOXX performance specialist Rich Petit, a conversation Howard clearly remembers because it was so . . . refreshing. “Rich is such a good guy,” says Howard. “He began by asking me lots of questions—what we do, what programs we use, were we just using AutoCAD, and then, after all this conversation, says, ‘You don’t need this expensive machine! This was really impressive to me because he actually down sold me to what I needed. These days, if you walk onto a car lot looking for the standard Mustang, they try to up sell you into some crazy, expensive automobile. It was really refreshing for a guy to say, ‘Let’s see what you need. You don’t need the \$5000 computer version of the Ferrari—you just need this.’ He was able to whittle it down to exactly what I needed and then guarantee it. If I buy one from Dell, they don’t guarantee it. To me, this is one of the most impressive aspects of the company. I was looking at a \$5000 machine and he had me down to a \$3500 workstation and a 30-day money back guarantee. We couldn’t lose!”

The workstation in question was the overclocked, 4.5 GHz APEXX 2 2401 featuring an overclocked Intel® Core™ i7 processor, and NVIDIA Quadro K2200 graphics card. Howard consulted with his boss, and after a little back and forth, was told to go ahead and order it. One aspect of Howard’s story which should be noted is this: prior to this occasion, Enfinity had always been a Dell shop, using Precision model machines as long as Howard had been employed there.

Enfinity also has a contract through their outside IT group which provides all of their computer systems. "They actually buy them and own them and we rent them as a part of our contract," says Howard. "My boss said, 'Forget it, we're just going to buy this unit and try it,' and when we did, we discovered that this BOXX was more than twice as fast as any of our other units. It was mind blowing. Our IT guys are responsible for taking the machines, setting them up, and installing their firewall stuff and all that. So one IT guy in particular, when he brought the BOXX back said, 'This isn't any faster than the Dell machine that we provide.' 'No way,' I said."

In order to settle the dispute, Howard and the Enfinity IT pro decided to conduct some tests. "We set them up side by side with the same architectural model I was currently working on," Howard recalls. "When we opened the model on the Dell, it took 43 seconds. With the BOXX, it took only 19, so it was over twice as fast." Unfortunately, the IT team still wasn't ready to give up the ghost, insisting that the Dell system was just as good. Howard was exasperated. "You just saw it," he told them. "The BOXX is over twice as fast! How can you tell me the Dell is just as good?"

According to Howard, the IT crew, not realizing that BOXX uses only enterprise class components, believed that the Dell computers were likely "built better," and that he (Howard) didn't know what type of components were inside the BOXX chassis. "I didn't know what parts they use," laughs Howard, "but I do know BOXX is more than twice as fast and they offer support." Howard paused for a moment and then added, "If I was building my own machine, I wouldn't go and buy all the same parts. I would buy the best of every part out there and put them together. So to simply say that all the parts are not made by Dell, so therefore it's inferior, doesn't make sense. Dell doesn't make all their parts anyway. They buy from other manufacturers." Howard believes that because the IT group was partnered with Dell, they were simply trying their best to defend the multinational commodity PC maker. "He said they could make a Dell just as good," adds Howard, "but their definition of 'just as good' was \$1500 more."



## THE ENVY OF THE OFFICE

Whether it's booting up, loading, or manipulating models, Howard raves about the speed and performance of his BOXX workstation, adding that the only thing that can possibly slow it down is Enfinity's overused company server. "That's the truth," he laughs. "When everyone is banging the server, it slows the BOXX down, but otherwise, the BOXX is always flying. Everyone else in the office is jealous." When I ask Howard if his APEXX 2 has been instrumental in meeting a critical deadline, he has a story at the ready. "We just did a job called Centerre," he says, "a rehab hospital. We had five weeks to do the job from start to finish which is unbelievable crunch time. At the same time, I was running National Park Medical Center—two jobs on parallel paths. Both of them were Revit and there's no way I could have done all the crunching, all the reloads, all the opening and closing, popping back and forth between the two projects, and still make my deadline. There were people in here cussing right and left. As a matter of fact, the last night I was here until 11pm while another guy stayed until 2am. He was cussing at his machine because it wouldn't hurry up and regenerate. There's no doubt I'm the envy of the office."

**"My boss told me the other day that this BOXX is going to be the standard every time we buy a machine," says Howard, "so we will become a BOXX shop—no doubt about it." - Richard Howard**

Howard also appreciates how the BOXX affords him the opportunity to easily work off site. "I remote into my machine a lot of times," he says. "In the past, I had a Dell T5600 to remote in and it was kind of fast, but I can see a huge difference when I remote in to my BOXX versus that Dell. I love it and if they try to take it away from me I'm going to protect it with a shotgun or something. Just keep on making great machines because I'm going to want another one in a couple of years." Howard's only lament is that last year, prior to landing the BOXX, Enfinity purchased a number of Dell systems, so it appears that a lot of Enfinity employees may have to wait while these systems reach their end of life. But yet, he still sees a silver lining. "We do have some older ones they're talking about replacing," he says. As a matter of fact, since this interview, Enfinity has added two more APEXX workstations to their quiver. "My boss told me the other day that this BOXX is going to be the standard every time we buy a machine," says Howard, "so we will become a BOXX shop—no doubt about it."



In fact, Howard is so sure of this conversion to BOXX, that he envisions a future where Enfinity Engineering will not only rely on BOXX desktop models, but GoBOXX mobile workstations as well. "A lot of our engineers travel," he says, "so they have been buying the Dell Precision ten pound notebooks." (In fairness to Dell, the notebooks are actually 7.86 lbs.) Howard continues, "In the last year or so, they started going to the thinner, slim notebooks, but they didn't have the computing power. I showed my boss the GoBOXX 15 SLM (4.36 lbs.) and he asked if they had enough power to run Revit. I said, 'Yes, that's what they make it for.' It's phenomenal that you can get that much power in a light, little laptop. So now he's feeling the guys out as to which way they want to go, notebooks or remote in with a Windows Surface."

As our conversation comes to a close, Howard asks me to extend his thanks to Rich Petit for sending him a BOXX t-shirt. He says he recently donned the shirt for an archery tournament but was forced to explain its meaning to another contestant." The guy says, 'That shirt doesn't make any sense,' Howard recalls, "My BOXX is Faster Than Your Box.' I said, 'It's BOXX with two X's, and it makes perfect sense."

As expected, Richard Howard hit the bullseye.

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**BOXX**