





When you're building highly specialized software for defense contracts, setting up production-ready hardware shouldn't become a project in itself. But that's exactly the situation **GET Engineering** faced.

The San Diego-based firm, known for developing advanced applications for government agencies, had secured a **Phase 1 SBIR (Small Business Innovation Research)** award. Their challenge: take a promising software prototype and turn it into a deployable, virtualized device that could run reliably in a VMware environment.

They had the software. What they didn't have was the infrastructure or expertise to build a hardware system around it. They were looking for a quick low-cost R&D solution.

The Challenge: From Prototype to Proof-of-Concept—Fast

GET Engineering knew their software worked. But they needed help getting it off of their development laptops and into a deliverable format—one that could eventually be used by a customer. That meant:

- Running the application inside a virtual machine
- · Configuring a stable, cost-effective server
- Getting up and running quickly to meet SBIR deadlines

They also needed a team who could guide them through the world of virtualization—something they understood conceptually but had never fully implemented.

The Action: A Consultative Approach from Radeus Labs

Enter **Radeus Labs**, a San Diego-based computing and SATCOM solutions provider known for its **custom engineering support** and commitment to long product life cycles. Referred through a shared board connection, the Radeus team jumped in with a collaborative kickoff call that helped narrow down options, weigh tradeoffs, and define the hardware requirements.

Andrew Correnti, Senior System Architect at Radeus Labs, remarks:





We have customers who come to us with a specific request—and others who come to us with a problem and no clear solution. GET Engineering was in the second camp. They had solid software and just needed a partner to help build the right environment around it.

Radeus proposed a custom 1U GPPC server with:

- VMware vSphere Essentials as the level one hypervisor
- RHEL 7.9 OS pre-installed
- Dual SSDs
- An 8-core CPU
- On-site setup support

IT contractor Gene Alferos, who has supported Radeus for over five years, joined the team for deployment. He notes:





It was a very smooth integration. We spun up a new virtual instance in a matter of minutes. I thought it was clever and innovative.



The Solution: A Virtualized Environment That Just Worked

Thanks to close collaboration and hands-on support, GET's application ran successfully in the VMware environment **on day one**. The system had everything needed to act as a proof-of-concept for the SBIR evaluation team.

Gene describes the solution:



Radeus came up with an elegant solution using virtualization to mimic the functionality of complicated components. It was interesting and not an application I'd seen before.



Radeus not only delivered the initial system, but also offered scaling paths, including:

- A cost-effective prototype for short-term use
- Consulting support for deployment
- Future-ready, production-level server configurations

The Result: A Confident Step Forward—Without Overengineering

With Radeus Labs' support, GET Engineering was able to quickly solve their technical challenge—creating a virtualized prototype environment that worked exactly as intended. Their application ran smoothly in VMware, allowing them to test their software in a real-world hardware configuration—without delays, missteps, or unnecessary spending.

Radeus offered flexible paths forward, providing both a **cost-effective MVP** with consulting hours and a **production-grade loaner** for more advanced needs. This allowed GET to validate their software and continue development at their own pace, with infrastructure they could rely on.

Andrew points out:



Their team didn't have to become hardware experts overnight. We filled in the technical gaps so they could stay focused on delivering their core innovation.



The project marked a successful collaboration—clear communication, fast turnaround, and a trusted local partner who showed up with solutions, not complexity. With their environment now stabilized, GET Engineering has a practical path forward, whether they scale up hardware or continue iterating with support from the Radeus team.

The GET Engineering Team praised the overall project:



Radeus didn't just ship us a server—they became an extension of our team. They asked the right questions, gave us options that fit our budget and timeline, and were there every step of the way. We weren't just buying hardware—we were getting real engineering support



ABOUT RADEUS LABS

At <u>Radeus Labs</u>, we deliver advanced, purpose-built solutions that empower our clients to excel in the most demanding environments. With a steadfast commitment to innovation and reliability, we specialize:

- Ruggedized computing systems,
- Precision-driven satellite communication solutions
- Custom-built technology designed to meet unique challenges

Our products are engineered for longevity, with a lifecycle exceeding 10 years, ensuring exceptional performance and cost efficiency.

From concept to deployment, we manage the entire process in-house—offering engineering, manufacturing, and end-to-end support to maintain the highest standards of quality and consistency. At Radeus Labs, we don't just build technology—we build solutions that last.

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