


Egenera Chooses ArrAy Dual Shore Outsourcing

As a leader in data center virtualization solutions since 2001, Egenera (www.egenera.com) has engineered a new server architecture that simplifies data center infrastructure. The Egenera® BladeFrame® system's unique virtualization software dynamically allocates and repurposes servers to applications as needed without manual intervention. With its integrated system of diskless processing resources and virtualization software, Egenera has set a new standard for simplicity and business value in the enterprise data center.

Developing, testing and continuously innovating a leading-edge data center virtualization system is a major business priority for Egenera. As a result, a highly synchronized, collaborative relationship with its outsourced engineering partner is of critical importance.

According to Matt Zywusko, Software Engineering Manager for Egenera, “Our previous outsourced engineering firm had extremely specialized development and quality assurance engineers so it would take us a long time to ramp up a new project. We communicated with them primarily via email, which was inefficient. For example, if I had a question in the afternoon I would send an email and get a response the next day at best. Our ability to measure projects and status was primarily limited to periodic reports, and we had no central repository for monitoring activities.”

Egenera evaluated alternatives, and selected ArrAy Incorporated initially for a small QA project.

	The Data Center Virtualization Company	“ArrAy delivered the first project under budget and ahead of schedule, and we didn’t have to invest a lot of time in training ArrAy engineers,” explained Zywusko. Egenera engaged ArrAy for additional projects, and has steadily increased its activities with ArrAy.
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Selecting a Blended Onshore/Offshore Engagement Model

The initial Egenera project was for QA services for a new Egenera® Processing Blade™ module. “Our previous outsourced engineering services relationship was less efficient and cost effective than we knew it needed to be,” said Zywusko. “ArrAy’s business model was immediately appealing to us because it gave us the option of a blended onshore/offshore delivery model.”

ArrAy offers an innovative Dual Shore engineering model that provides a blended delivery model of U.S. and offshore engineering resources. A U.S.-based engineering manager for ArrAy visited Egenera and developed the test plan, and offshore engineers at ArrAy China implemented the program.

“The onshore ArrAy engineer was a senior developer who understood our products, our processes and our test cases, and he was able to organize the project efficiently for his colleagues in Guangzhou,” said Zywusko. “The project was well bounded, and the offshore engineers were experienced and required very little training. Many of them had graduate degrees, and all of them had relevant experience. ArrAy delivered initial results very rapidly.”

Developing a Long-Term Partnership

Based on the success of the initial engagement, Egenera has selected ArrAy for additional QA and software development services. “We initially staffed our engagements too small, and we found that we were adding responsibilities because ArrAy was delivering results,” said Zywusko.

Egenera has increased the size of the engagement several times since then, and has plans for further expansion over time. “Working with ArrAy has been a positive experience for us. Even negotiating terms and creating new projects is more efficient because ArrAy takes the time to understand our requirements. With ArrAy we have been able to define evolving projects and finalize terms in only a few days,” he said.

Most of the ArrAy engineers supporting Egenera are based in China, and the onsite engineers are based at ArrAy’s headquarters in Marlborough, Massachusetts—located in the same town as Egenera’s headquarters. “We haven’t needed to have ArrAy engineers located onsite at our location because they are based only five minutes away, but we talk with them daily and they drive communications with the offshore engineers,” said Zywusko.

ArrAy’s flexible engagement models have allowed Egenera to react quickly to evolving market requirements. “As we were scaling up our use of ArrAy engineers we had the flexibility to add new resources quickly when we needed them,” Zywusko stated. “For example, if our product roadmap changes and we need to shift our application development priorities, ArrAy provides us with incremental resources billed separately that allow us to exceed our contract agreement while meeting our evolving product development goals.”

Communicating With Offshore Engineers

ArrAy follows a unique and innovative engagement model that ensures the success of each client project. At the core of the model is the ArrAy Way, a proven methodology that harnesses processes, problem-solving skills and people in a special teaming and knowledge-capture environment. Integrated with the latest design, development and testing methodologies, the ArrAy Way fosters repeatable results, knowledge capture and highly integrated working relationships, and it results in world-class levels of software engineering productivity. Accumulated technical knowledge is captured in a centralized Knowledge Repository that is customized for each customer. Authorized Egenera managers access the Knowledge Repository via ArrAyWeb, a robust management and reporting portal.

The ArrAy Work Activity Document (WAD) functions as the heart of the Knowledge Repository. As ArrAy team activity progresses on an engagement for Egenera, team members continuously accumulate valuable information about software activities and the steps taken to

address ongoing engineering challenges. Team members record all their hypotheses, strategies, plans, findings, tests, test results and implemented actions into WADs, which Egenera regularly reviews online via ArrAyWeb.

ArrAyWeb provides a browser-based interface that delivers real-time insights into the status of tasks and activities so customers can effectively track outsourced engineering services. It is a portal designed to facilitate the flow of technical and project information between ArrAy engineers and ArrAy clients. ArrAyWeb integrates browser-based access to engineering information with collaboration tools that allow customers to efficiently communicate with ArrAy engineers to enhance engineering productivity.

It delivers absolute, daily visibility into current projects and historical information and it provides Egenera with lasting business advantages. The Knowledge Repository provides documented and easy to access information about software engineering activities that remain with customers, and ArrAyWeb access to the Knowledge Repository allows customers like Egenera to benefit from institutional learning and the ability to readily access and share knowledge and information.

“My colleagues at Egenera and I use ArrAyWeb daily and it allows us to manage activities and monitor program status,” Zywusko continued. “We can track daily activities and communicate online with ArrAy engineers. With ArrAyWeb we can dig into the WADs and really understand what the software developers and QA professionals are thinking so we can monitor program activity and carefully integrate outsourced software engineering services with internal engineering activity.”

Egenera communicates with ArrAy primarily through ArrAy’s onshore engineers, but they also conduct regular phone conferences and plan to conduct regular videoconferences with ArrAy in the future. He stated, “When we first engaged ArrAy, we were worried about the time zone difference between the United States and China, and we were also concerned about whether there would be any language barriers. But ArrAy offers a documented methodology for managing software engineering, and we are able to track all activity via ArrAyWeb. There have been no language issues at all.”

Egenera has flown ArrAy engineers from China to the U.S. to start major programs, and Zywusko and several members of his team plan to visit ArrAy China over the coming months. “Integrating offshore engineers with internal engineering staff is important for building relationships that deliver results,” he said. “Egenera has achieved additional engineering productivity results through our relationship with ArrAy, which is one of the reasons why we’ve continued to grow our business relationship with them. ArrAy complements our internal engineering resources and gives us the flexibility to evolve our products to support emerging market requirements.”

He added, “Overall, ArrAy has been an excellent partner, providing Egenera with onshore and offshore resources to assist us in quality assurance, testing and tools development for our hardware and software releases. We’ve been very satisfied with the quality of ArrAy’s work and the quality of the resources provided. ArrAy’s ability to react quickly to changes in staffing

requirements and its methodology for knowledge capture and client communication have also been key factors in the success of our relationship.”

Zywusko concluded, “ArrAy offers a proven methodology for software engineering that delivers on the goals we set for the engagements. ArrAy adapts to our needs and augments our internal engineering capabilities with scalable onshore and offshore resources. The Dual Shore model allows us to rely on a blended delivery team so we can reduce the cost of engineering while delivering high-quality features and more efficiently leveraging the expertise of our internal engineers.”

Find Out More about ArrAy Incorporated

ArrAy Incorporated is an established, global software engineering services firm that provides unique outsourcing support to software developers. ArrAy's comprehensive services—including Product Specification, Development and Enhancement, Testing and Automation, Migration and Porting, Product Maintenance and Support and Consulting services—are delivered via our proven ArrAy Way methodology. For more information about ArrAy, visit www.arrayinc.com or send an email to info@arrayinc.com.

