

Superior SOLIDWORKS® Product Development Environment Realized with a Hybrid Compute Infrastructure and Managed Services

EndoChoice uses EpiGrid solutions to deploy a leading-edge product development environment that speeds time-to-market--saving time and money.

<p><u>Objective</u></p> <ul style="list-style-type: none">Accelerate product development through better collaboration with a scalable, reliable, and secure infrastructure that has predictable and lower costs. <p><u>Approach:</u></p> <ul style="list-style-type: none">Implement EpiGrid's hybrid (cloud and on premise) engineering compute infrastructure that supports a fast-paced development environment spread across 3 countries that is failsafe, always available and fast.Eliminate the need for on-site IT infrastructure and application support by using EpiGrid's managed services for all SOLIDWORKS CAD and Product Data Management (PDM)—implementing Virtual Desktop Infrastructure (VDI) in the cloud and managed on premise hardware.Enable business flexibility with EpiGrid's Virtual Desktop Infrastructure (VDI) for "CAD in the Cloud" for users. <p><u>Business benefits:</u></p> <ul style="list-style-type: none">Saved time with more effective collaboration and IT simplicityAccelerated product development cyclesReduced costs/complexity through VDI and managed services
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To be successful in today's extremely competitive medical device industry, companies rely on breakthrough innovation. At the same time, they need to shorten product life-cycles. Many medical device manufacturing companies are looking for creative ways to enable the very best product development environments.

One of these leading edge medical device companies is [EndoChoice](#). Based near Atlanta, Georgia, EndoChoice manufactures

groundbreaking technologies including endoscopic imaging systems and other devices that treat a wide range of gastrointestinal conditions, including colon cancer.



Challenge: IT complexity slows innovation, distracts from core competencies

Because the medical device industry is so competitive, and additional hurdles like clinical trials and FDA approvals tend to slow development, there is even more pressure on product development cycles than in other industries. At EndoChoice, product development is shared between three offices in three different countries (Germany, Israel and the United States). EndoChoice also works with consultants, contractors and field teams worldwide. Together, these

issues presented huge collaboration challenges.

"Difficult collaboration with our global sites, consultants, and customers limited our ability to effectively do business," explained Kyle Moore, R&D Manager at EndoChoice. "We needed a solution that would allow us to bring innovative products to market faster, while saving us time and money."

Solution: Implement outsourced managed services on a hybrid compute architecture.

In 2013, EndoChoice turned to [EpiGrid](http://epigrad.com/) (<http://epigrad.com/>) to solve these challenges. Based in Georgia, EpiGrid offers cloud computing and managed services to engineering and manufacturing companies. EndoChoice is now using EpiGrid solutions for their product development applications, which include SOLIDWORKS CAD and Enterprise PDM. For their engineering workstations, they use both cloud-based virtual desktop infrastructure (VDI) and traditional on-premise workstations.

- Collaboration simplifies product development**

The biggest benefit EndoChoice has seen since implementing EpiGrid solution is improved control and collaboration. “With stakeholders all over the world and design in multiple offices, effective collaboration and control over design processes was a critical business objective,” said Kyle Moore, R&D manager for EndoChoice. “Being part of an FDA-regulated industry, it is imperative to have design control over our CAD files that a PDM solution would provide to us.”

EndoChoice turned to EpiGrid because they didn’t want to purchase and maintain the infrastructure needed to run a PDM solution. Moore explained, “A hosted and managed solution gave us the scalability and flexibility we needed—without the hassles of maintaining our own data center. EpiGrid allows us to concentrate on what we do best—making life-saving medical products.”

To improve the control of the design process, EpiGrid created a powerful hybrid system by integrating EndoChoice’s existing hardware infrastructure with a goal of a new global network implementation in the cloud. This allowed CAD workstations and PDM servers to provide a reliable global system of collaboration and control using a single design environment—accessible anywhere in the world, on any internet-enabled device.

- ***VDI and hosted solution provides unprecedented flexibility, control and scalability***

EpiGrid managed services and VDI have allowed EndoChoice to implement scalable and rapid deployment of SOLIDWORKS CAD to new users. Because of the hosted, managed services model, EndoChoice is guaranteed computing uptime using the latest hardware technology. Access to state-of-the-art hardware with guaranteed uptime speeds product development and provides peace of mind. EpiGrid’s VDI solution enables clients with the flexibility to scale resources and add high performance workstations in the cloud for additional users, in an efficient manner according to their needs.

“Being able to scale compute power to meet changing company demands was an issue for us,” Moore said. “By using EpiGrid’s VDI solution, we were able to quickly scale resources to accommodate staff additions during crucial phases of development.” With EpiGrid’s persistent VDI’s, a user’s environment is fully maintained just as if they were using a workstation under their desk.

EpiGrid uses *automatic fail over*, which means that when a hardware fault is detected, the user is instantly transferred to redundant hardware without missing a beat. This process ensures that hardware failures are a thing of the past. Managed services are provided both for the VDIs and servers in the cloud—in addition to on-premise workstations and servers.

Using VDI, all the computing is done in the cloud—even the graphics processing. Locally, EndoChoice employees only need a display of their choice. Using a laptop, or merely an iPad® with a mouse and keyboard, a user can run SOLIDWORKS CAD. Setup can occur very rapidly, in a matter of minutes. Each VDI is configured according to the individual user’s needs and can be reconfigured on the fly with a simply request.

According to Moore, “Our stakeholders need access from a variety of devices, ranging from engineering workstations to Apple® iPads®/Tablets. With EpiGrid, it is no longer a concern. If you can open a web browser and establish a secure connection, you are in. With a simple bit of training, we can get our contractors up in minutes, using both SOLIDWORKS and collaboration through PDM. Using EpiGrid and VDI, we now have a level of flexibility that we would never have previously using SOLIDWORKS.”

- **Streamlined infrastructure saves time and money**

Using EpiGrid’s cloud-hosted infrastructure and applications management services, EndoChoice no longer needs resources to perform administration of the hardware or applications, saving money and increasing flexibility with all of their IT processes.

EndoChoice also eliminated the cost and burden associated with software upgrades. Instead, by hosting and centrally locating, upgrades have now become more simple – eliminating expensive hardware and infrastructure upgrade costs and version mismatch problems for users.

“The EpiGrid common, central interface makes upgrading software from one version to the next a snap,” said Chad Garrish, Chief Technical Officer at EpiGrid. “Better yet, upgrade decisions are no longer limited by current customer hardware environments. It is a simpler decision because of our lower infrastructure cost and ease of use.”

According to Moore, EndoChoice has been able to save approximately 80-90% in setting up the IT requirements of new staff, simply by using VDI. And of course, by implementing a hosted solution, we save 100% in terms of the IT resources since we no longer need the onsite servers. “We don’t have to worry about purchasing equipment, dealing with upgrades, or any other hardware issues that one would typically see when trying to manage a data center. EpiGrid takes care of everything for us.”



A higher level of confidence

EpiGrid provided a redundant cloud infrastructure equipped with state-of-the-art security and disaster recovery capabilities. Coupled with the support of expert administration and preventive maintenance, EpiGrid’s managed services created the ultimate peace of mind that EndoChoice needed worldwide.

“If something were to happen to our building, we don’t have any worries, because most of our servers are in the cloud with

backup and failover and our on-premise servers are replicated to the cloud,” continued Moore.

“EpiGrid provides excellent customer service and is extremely responsive to our needs. Using EpiGrid, we have a top-performing engineering compute environment that is scalable, secure, resilient and cost effective.”



EpiGrid offers cloud computing and application managed services. Founded by engineers, EpiGrid specializes in applications that the support the manufacturing and engineering functions.

With EpiGrid’s managed services, complete application management is provided so on-site administration is not required — applications can be in the cloud, on-premise or a mixture of both with the EpiGrid hybrid compute architecture.

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