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Your route to innovation

OPTIMUMENERGY

Optimum Energy saves time and money with a custom tool for intelligent HVAC system design

Optimum Energy
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EXIT83 worked with Optimum Energy to transform the company's intelligent HVAC system design process. Through strategic planning, design, development, and deployment of a new Plant Overview Tool, Optimum Energy is saving significant time and money and creating more consistent, informative visuals to drive sustainability initiatives with their customers.

The new Plant Overview Tool developed in partnership with EXIT83 gives Optimum Energy:

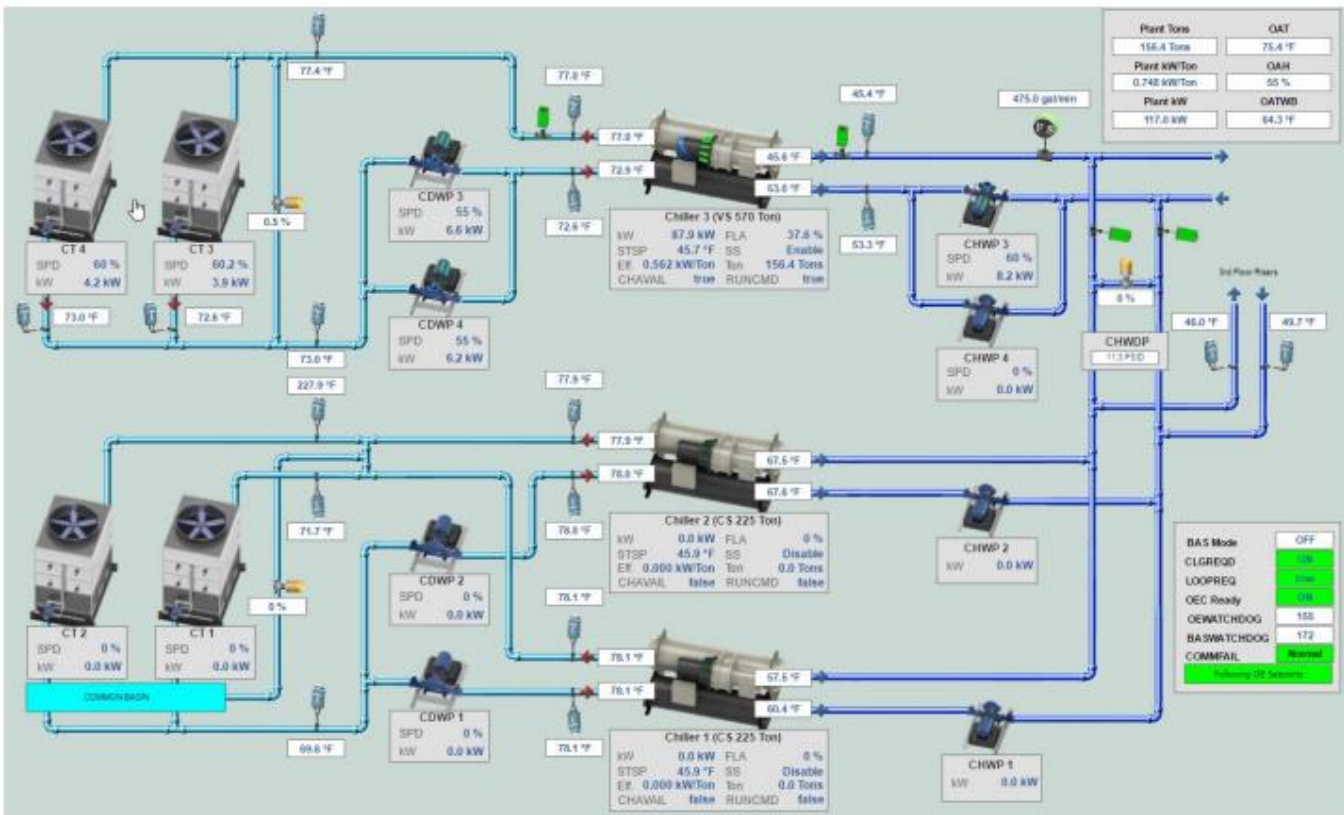| **Faster time to design**	**More intuitive user experience**	**Software cost savings**
Features like templates and a simple drag-and-drop UX speed creation of new plant overview designs.	The tool integrates with and supports the way designers naturally prefer to work.	With the new tool in place, there is no need to rely on costly software that is too complex and overpowered for the task.

HVAC workflow design: business-critical, but costly and inefficient

Optimum Energy began in 2005 with the dream of doing more with less to accelerate the world's transition to resource sustainability. The company has since completed hundreds of installations across four continents, pioneering software-based HVAC optimization in the process.

Optimum Energy's intelligent software solutions connect the chillers, fans, and other system equipment in a commercial HVAC system to IoT sensors that give real-time updates on metrics like temperature, gallons per minute, and kilowatt hours. By analyzing the data collected by the sensors, Optimum Energy recommends how to optimize HVAC settings for greater efficiency, helping customers significantly reduce their energy and water usage, save on energy costs, and meet sustainability goals.

A detailed visual representation of the customer's HVAC workflow—the plant overview—plays a critical role in understanding how the system is designed. However, designing a plant overview was a manual and process- intensive for Optimum Energy's team. Creation of a single diagram could take up to six weeks and with no way to create templates or reuse groups of components, each diagram had to be built from scratch. What's more, the design software they licensed was expensive and overly complex, making for a costly and frustrating user experience.

An example plant overview design. "Setting New Standards for Ultra High Performance HVAC", Optimum Energy.

Optimum Energy knew they needed a better solution for plant overview design but were unsure how to address the complexities and inefficiencies in the process. They engaged EXIT83 for end-to-end strategy, design, development, and implementation of a new tool that would dramatically reduce design time, improve the user experience, and save licensing costs.

Enabling an ideal design process

To start, EXIT83's design and product development teams conducted interviews with the client and shadowed them to see how they used their current tools. This gave EXIT83 deep insight into Optimum Energy's business and workflows. Drafting a list of the capabilities Optimum Energy needed and the goals of the plant overview design process helped EXIT83 cut through the complexities of the process to find the most effective path forward.

With this understanding as a north star, EXIT83 drew on decades of software experience—with expertise in UX/UI and IoT—to define a custom Plant Overview Tool that included a Plant Overview Designer and Plant Overview Viewer.

The EXIT83 team brought:
- Business strategy
- UX/UI
- Product design
- Web-based app development
- API design
- Product management
- IoT

To drive immediate value, the Plant Overview Tool would:

- Accelerate the design process by eliminating roadblocks such as the inability to create templates

- Create a more intuitive user experience, in part by integrating naturally with the way Optimum Energy ideally wanted to work

- Save on licensing costs from their current software

"I can't say enough about EXIT83's design team. They quickly understood the way we work and saw right away what our people needed to be successful."

"The Plant Overview Tool has been a gamechanger—we can not only work faster but get new team members up to speed right away. We're excited to continue working with EXIT83 to improve our processes."

"It's obvious that EXIT83 knows their stuff. We thought this couldn't be done—but they showed us a better way to tackle our challenges and blew all our expectations out of the water."

- Optimum Energy

Realizing major efficiency gains

Now, Optimum Energy can create plant overviews in just 1-2 weeks. The Plant Overview Tool uses an intuitive interface with drag-and-drop and copy-and-paste functionality to create schematics in 10-15% of the time. Plus, they can use a plant as a template to build the diagram for a new plant simply by clearing the sensors from the diagram and adding sensors for the new plant.

Optimum Energy is saving both time and money by eliminating software licensing costs and achieving major efficiency gains in the design process. Through their continued partnership with EXIT83, the company is now exploring additional opportunities to enhance their business with technology innovations.

The Plant Overview Tool is transforming how Optimum Energy works because it is designed exclusively for their team, their process, and their goals.

Where can custom technologies drive efficiencies for your business? What workflows or processes could go smoother with a solution built just for the way you work?

Contact the EXIT83 team to start innovating, together.
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