Case Study: NovaComp  
NovaComp Simulates More Collaboratively with SimManager Workgroup Edition

Customer: NovaComp Engineering, Inc.  
Industry: Engineering services  
Headquarters: Bothell, WA  
Solution: SimManager Workgroup Edition  
Results: Improves communication and enhances transparency for all stakeholders in a CAE project, reduces the risk of losing critical data whether at the office, at home, or on the road, and works as an out-of-the-box solution that can be up and running in a matter of hours.

About NovaComp Engineering, Inc.  
Founded in 1990, NovaComp Engineering, Inc., provides finite element analysis (FEA) as a service to a wide range of industries. By combining deep experience with state-of-the-art computing and analysis tools such as Marc, NovaComp helps engineers solve complex linear and nonlinear problems in the fields of heat transfer, stress analysis, structural dynamics, and fluid flow.

The Challenge  
With an extensive list of clients—including some of the most recognizable names in the high-tech industry—NovaComp’s small staff is accustomed to handling huge amounts of data. “When we conduct an analysis, we usually receive a lot of information from the customer over the course of the project,” says Nils Juhlin, President of NovaComp. “Then, of course, we generate some of our own input during the analysis process. The result is just a great mass of information that can be difficult to keep organized.”

Traditionally, Juhlin created a desktop folder for each project, then archived the folder for retrieval. However, when he would revisit a past project, he often had difficulty identifying the latest version of each file. “File names usually aren’t very descriptive, especially if you’ve been away from a project for awhile,” he says. “In revisiting projects, we found ourselves spending far too much time digging through folders for the right information. We wanted to achieve a higher level of traceability for every customer engagement.”
The Solution

Juhlin looked no further than SimManager Workgroup Edition from MSC.Software. “We’ve depended on other MSC.Software products for a long time—particularly Marc and Mentat,” he says. “I’ve used competitors’ FEA programs and a number of pre- and post-processors, and I’ve always associated MSC.Software with best-in-class technology and strong support. So my search for a content management solution began and ended with SimManager.”

Installation was quick and easy. SimManager is an out-of-the-box solution that requires little or no configuration, enabling Juhlin to install the program in 2 hours. Then he spent another 1-2 hours learning how to use it with the help of a video demo. “SimManager is a Web-based application, so you can deploy it quickly from a central location without loading it on individual machines,” says Juhlin. “It really provides an ideal combination of flexibility and ease-of-use.”

When Juhlin receives CAD files from customers, he writes a detailed description of each file as it comes in. Then he writes another description after the file is revised, organizing everything within SimManager for quick access and retrieval. “SimManager makes it easy for us to describe what we received from customers and what input we included ourselves,” says Juhlin. “That way, our team members can always keep track of what’s been done, because SimManager records exactly what, how, and when each piece of data is generated. It tells you who was responsible for creating it and what version they used. So everyone has real-time visibility into the project, and anyone can step into it at any time. That helps us ensure a higher level of business continuity.”

The Benefits

SimManager improves communication and enhances transparency for everyone involved in a CAD project. All internal stakeholders can view project status at any time, minimizing the need for them to contact each other for the latest details. “Communication is key to running a smooth operation, whether you’re managing a team of two or 200,” says Juhlin. “SimManager gives everyone a chance to be on the same page throughout the course of any given project. That saves time in meetings, and it helps ensure that a single person isn’t the gatekeeper for all information related to a project.”

By giving all project participants easy access to simulation data, SimManager makes it more convenient for employees to work remotely. “I often work from home, and with SimManager I no longer need to get on the phone with coworkers to explain how I’ve organized files,” says Juhlin. “SimManager also makes it easier for us to access files when we’re visiting client sites. It reduces our risk of misplacing critical data whether we’re at home or on the road.”

In his years as a consultant, Juhlin has seen a number of content management solutions in action. He would recommend SimManager for manufacturers of all sizes. “You can use this program from the concept stage until you send your project out the door,” he says. “You can involve all of your development and even your marketing staff so that they can work together concurrently and collaboratively. SimManager makes it possible to achieve a far more streamlined product development process from one end to the other.”

Future

For Juhlin, the next step is giving his customers convenient access to the simulation data associated with their specific projects. “Eventually, our customers will be able to log into their own portals within SimManager and see how we’re progressing,” he says. “That’ll be a great service for them—and a competitive differentiator for us.”

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- Nils Juhlin, President, NovaComp

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