# RSS Solutions Keeps Customers on Schedule with Eclipse RCP



**RSS SOLUTIONS**

In the world of manufacturing, meeting promised delivery dates are every bit as important as they are for software development teams. Ontario, Canada-based RSS Solutions Inc. ([www.rsssolutions.com](http://www.rsssolutions.com)) is a software company that builds software products that help manufacturers stay on schedule, focusing on delivering advanced planning and scheduling (APS) solutions to manufacturers in aerospace, auto testing, metal fabrication, tooling, and other enterprises. RSS clients typically have on-time delivery issues, excessive overtime and other operational cost concerns, as well as multimillion dollar machines that they like to keep as productive as possible. For manufacturing organizations to compete, effective planning and scheduling of their production facilities has become essential to doing business. Using the Eclipse Rich Client Platform (RCP) has made it possible for the RSS Development Team to meet a very aggressive delivery schedule and successfully release the latest version of its NaView APS and execution system in June of this year.

## Focusing on Features—Not Frameworks

RSS Solutions has been developing and marketing APS solutions for more than 20 years, with NaView debuting around eight years ago. Originally, the application was designed for a single user or a cluster of users and was developed in Visual Basic and C++. In planning the upcoming NaView version 5, RSS decided that the code base was beginning to get dated. It didn't have the

> **"The reason that we thought RCP would be a really good solution for us was that, in using it to build a prototype, we found that it was incredibly fast to come up with a solid, stable application with very little work"**



scalability or the fidelity in the client experience that the company wanted to provide, so the decision was made to do a complete technology replacement, re-architecting the entire application and moving to Eclipse RCP and J2EE.

"The reason that we thought RCP would be a really good solution for us was that, in using it to build a prototype, we found that it was incredibly fast to come up with a solid, stable application with very little work," says Phil Menary, Director of Software Development for RSS. "It meant that the majority of our resources could go into working on the business side of the client rather than working on things like how a frame comes up and what it does when a client interfaces with it. The client framework was already there for us, and it let us shift our focus away from the infrastructure while still building a rich interface."

RSS Solutions uses the Eclipse IDE to do all of its application programming, from pure Java development to using Eclipse RCP plug-ins. "We're very fluent in the platform itself and we used the framework to author our product," Menary says. NaView Version 5.0 is now an Eclipse-based client-server application that leverages a number of web technologies, including SOAP services.

## Eclipse RCP: Richer Than a Web Client

The Eclipse RCP has had a particularly large impact on RSS's development of the latest version of its NaView product, helping the company offer new features and benefits to its customers. "Eclipse RCP

is a platform that allows us to put product features into the system a lot quicker," Menary says. "Another area where customers see results is the power of the

manufacturing processes is RSS's forte, keeping the software development cycle running on time is a challenge for any company. With version 5.0

client application. The classic temptation would have been to use a web-centric solution like JSP instead of a rich client solution. At some point, you need to decide whether you are going to opt for a thin client that runs in a browser or have a footprint on the client. For us, because of the fidelity and richness of the interface that we wanted to provide, we opted for the latter approach. We wanted to offer features like drag and drop. We also wanted to include a concept that we call view synchronization, which allows users to click on a feature within the application and refocus the application universe with that feature as the focal point. Much of the functionality we wanted to offer wouldn't have been possible in a web browser context and probably wouldn't have been possible without RCP." Specific frameworks of Eclipse have also made it easier for RSS to integrate new interface features into NaView. The Graphical Editing Framework (GEF) plug-in, for example, was used to provide

of NaView, however, staying on track was made much easier using the Eclipse IDE and RCP. "It was pretty amazing," Menary says. "With most other long-spanning projects that run a year or more, I've never seen one that has come so close to actually hitting the completion date while adding features instead of throwing them overboard. We were within two weeks of hitting the date that was planned a year ago. As far as the client side goes, we credit a lot our success to using RCP and having the ability to just forget about the framework. It really is a cornerstone of our client solution and there's just no other way that we could have delivered the kind of richness and responsiveness that we were striving for. It's definitely going to differentiate us in the market." With companies like Goodrich Corporation, Inco Limited, Accurate Mould Company Limited, Atomic Energy of Canada Ltd., General Motors Corp., The Timken

users with the ability to draw diagrams using the product, and the integration of third-party libraries was made easier by support for Swing components.
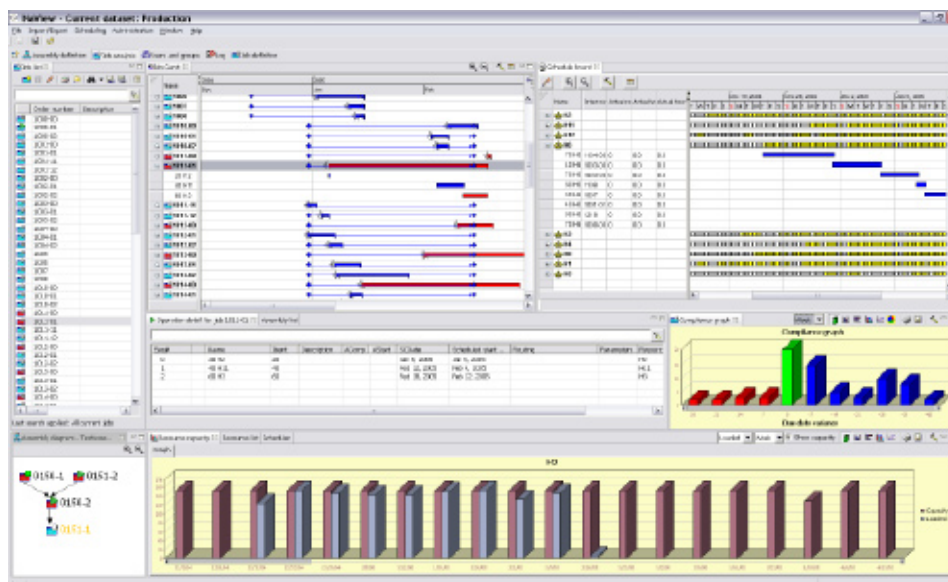
**Eclipse Keeps Scheduling Software on Schedule**

While helping users schedule



Company, and Stelco Lake Erie eagerly awaiting the latest version of NaView, shipping on time and exceeding customer expectations should give RSS a leg up on the competition.

**RSS was able to take Eclipse RCP and create an extremely high fidelity vertical solution using the basic building blocks of Views, Editors and Perspectives. In this case, a number of rich components have been integrated and synchronized to deliver a powerful dashboard perspective for analyzing complex manufacturing schedules.**