Charles Schwab & Co., Inc. realized that standardizing on the Borland® Together® ControlCenter® modeling tool would help establish collaborative communications across its many projects and would be key to achieving good design for development projects. Not only would it save development time, but it would also translate to significant cost savings.

**Background**

The Charles Schwab Corporation provides securities brokerage and related financial services for 8 million active accounts with $837 billion in assets. There are hundreds of software developers working in areas throughout Schwab. Senior technology management decided that in order to facilitate the consistency of architectures and development models across projects, the developers needed to speak the same language. After reviewing different choices, Schwab decided to standardize on Java.

After the company chose Java as its new language, it began to look at best practices in object-oriented design. It quickly became clear that Unified Modeling Language™ (UML™) modeling tools were an important component of good object-oriented development.

“Application development tools are somewhat of a ‘religion’ among developers,” said Ken Weiss, senior manager of Java Consulting for Schwab. “This can present a large problem when mandating the use of the same tool across the board.”

**Challenge**

Schwab realized that standardizing on a modeling tool would help establish collaborative communications across its many projects and would be key to achieving good object-oriented design for development projects. Not only would developers save time but also that time would translate to a significant cost savings as a result.

**Solution**

Schwab decided to survey its developers to determine the best product for the job. The product needed to be strong in Java development in order to protect the company’s investment in Java. After a short process of comparing features to features, Borland® Together® ControlCenter® was selected.
The developers chose Together ControlCenter not only for its strong Java support, but also for a variety of its unique features such as reverse engineering and application synchronization. These features allow developers to take existing Java code and automatically extract UML diagrams. Subsequent changes to the source code are easily fed back into the models, keeping the actual code and the underlying design documents in synchronization.

One of the biggest benefits to the developers at Schwab is the Together ControlCenter reverse engineering feature, which takes existing code and allows the developer to visualize the model using UML. Another important feature to the developers is simultaneous round-trip engineering, which ensures instantaneous code and model matching allowing for fewer bugs and faster testing. This allows Schwab’s developers to concentrate on what they do best - develop applications - which keeps Schwab operations running smoothly.

The Borland Mentoring program is a definite benefit to the developers. The program is focused on helping customers with product implementation and ongoing support. The mentors help the developers work directly on their code and see it applied to projects that are relevant to them at the moment, resulting in a shorter learning curve,” said Weiss.

Since July 1, 2002, Schwab continues to add licenses as developers rely more on Together ControlCenter.

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Ken Weiss, Senior Manager of Java Consulting, Schwab