

## Solution Brief

### Highlights

*Provides high levels of visibility and traceability between IBM Rational DOORS software, an enterprise-wide requirements management solution, and Windchill PLM software from PTC, supporting the development of better products faster and for less cost*

*Bridges the communication gap between requirements and systems engineers and mechanical engineers and designers*

## Ambassador Delegate for Windchill integration solution from IBM Business Partner Stoneworks Software Corporation.

### Ambassador Delegate for Windchill solution overview

No matter what type of product you are developing, requirements drive the development process. Poor requirements definition and requirements management practices are the largest contributor to project failures, while good requirements definition and requirements management practices are a major contributor to project success. And a key component of a good requirements management process is enabling the entire development team to work with the most current requirements.

Now your teams using PTC Windchill can use Ambassador Delegate for Windchill software from Stoneworks Software Corporation to more easily view and work with requirements managed in IBM Rational® DOORS® software. Ambassador Delegate for Windchill supports access to and traceability throughout the product development team. As a result, you can

be confident that your engineers are working to build the right products, and they immediately know when changes in requirements occur. This helps reduce development cost and speed time to market.

Ambassador Delegate for Windchill software is a plug-and-play tool with an interface based on the Windchill application. You can rapidly install it in your existing Windchill environment and start realizing benefits with minimal training. Based on a service-oriented architecture (SOA) and accessible via Web browser, the integrator is designed to make it easier for developers, designers and engineers to do their jobs. In fact, you can see at a glance whether requirements have changed, whether requirements have been met, and which product parts are affected by requirements changes. This level of insight helps teams communicate and collaborate effectively to produce quality, safe products.



## Solving a common problem within the development environment

Using Rational DOORS software, a systems engineer can develop requirements documents to support a project and then deliver them to a design engineer. After studying the requirements, the design engineer can use the Windchill environment to produce computer-aided design (CAD) data to represent physical objects and satisfy the requirements documentation.

But what happens when the systems engineer needs to modify the requirements document after the design engineer creates the CAD models?

The systems engineer may not be able to identify the CAD data that would be affected by a requirement modification, and now he must involve the design engineer—if they can coordinate schedules, of course. Or if the systems engineer is able to safely modify the requirements document, he is challenged with clearly articulating the document changes to the design engineer. Further, if the design engineer identifies an issue with a requirement during the design process, she is challenged with clearly articulating the problem to the systems engineer.

### Why choose Ambassador Delegate for Windchill?

Stoneworks Software Corporation designed the Ambassador Delegate for Windchill integration solution to provide unprecedented product development transparency, traceability and ease of use by offering you:

- An SOA framework, which *facilitates systems development and integration of other products*.
- A high level of *scalability* and access to multiple Rational DOORS databases.
- Advanced database caching capabilities that facilitate *quick data processing and retrieval response times*.
- *Redundancy*, which enables your information to be accessible.
- *An easy-to-use Web-based interface* that allows users to navigate Rational DOORS projects, modules and requirements.
- A new *unified access control* method that lets system administrators easily map user accounts across multiple platforms.
- An out-of-the-box, package-based installer with the *Ambassador Delegate for Windchill setup wizard* to guide you through installation.
- *Rapid deployment* capabilities, which help you to quickly and seamlessly integrate the solution into your network.

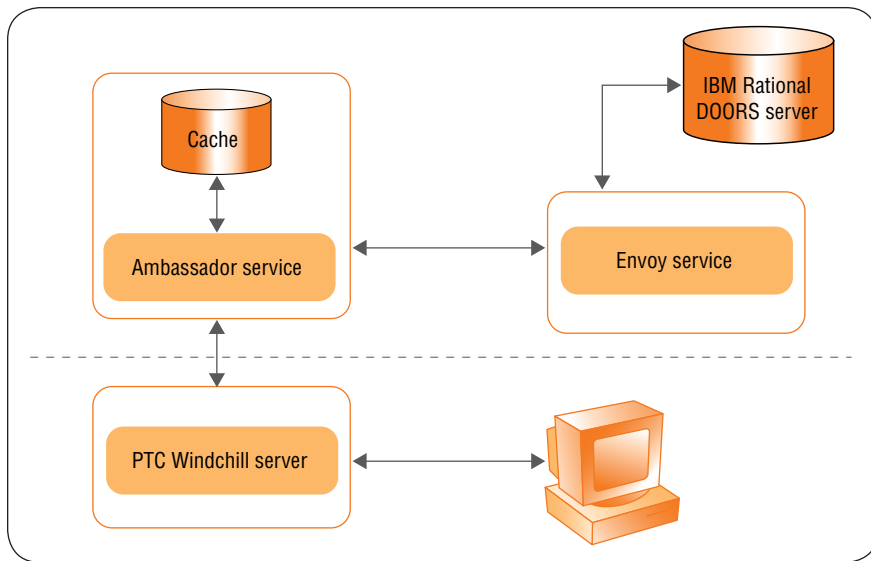
Because the systems and design engineering processes must have uninhibited communication, and because most organizations lack adequate and timely communications platforms, misalignment can occur between the requirements and CAD models. As a result, a company may end up with the wrong product—or worse—a defective or unsafe product. Consequently, it takes more time and money to bring a proper product to market.

Validated as a Ready for IBM Rational software solution, Ambassador Delegate for Windchill is designed to streamline communications between systems engineers and design engineers. A design engineer can establish relationships between a Rational DOORS requirement—or the whole module—and a Windchill object. The design engineer can then see any gap between the requirements and the design. She can also see whether the systems engineer makes a change in Rational DOORS to a requirement.

Ready for

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software



The Ambassador Delegate for Windchill solution is designed to streamline communication between systems engineers and design engineers.

### Detailing the traceability solution

Ambassador Delegate for Windchill integrates seamlessly into the Windchill Program, Product, Project and Library environments—or containers—of the Windchill 9.0 platforms. Each Windchill container can leverage one of three authentication methods to access a Rational DOORS server:

- Implement a single sign-on if Rational DOORS and Windchill use the same user directory server.
- Map Rational DOORS users to Windchill users, and prompt each Windchill user for a Rational DOORS login name.
- Leverage a common user account for individual Rational DOORS users who can access a respective Windchill container.

There is a one-to-one relationship between the Ambassador Delegate for Windchill solution and a Rational DOORS database. Ambassador Delegate for Windchill can be used by multiple Windchill containers.

Moreover, the traceability features in Ambassador Delegate for Windchill support the easy traversal of object relationships inside Rational DOORS and Windchill. Users can toggle between design data and requirements environments. And if Ambassador Delegate for Windchill integrates with the Windchill change system, systems and design engineers and others can collaborate on the review, approval and implementation of a requirement modification.

By integrating with the Windchill Product Structure Explorer, the Ambassador Delegate for Windchill solution allows users to quickly

identify parts and documents in the product structure that have requirements linked to them. It also makes it easy to identify the parts that are missing requirement links.

### A closer look at Ambassador Delegate for Windchill capabilities

The Ambassador Delegate for Windchill solution helps you to:

- View a Rational DOORS folder/project hierarchy.
- View Rational DOORS module baselines.
- Add Rational DOORS modules to Windchill folders.
- View an individual Rational DOORS requirement and its attributes and links.
- Search the Rational DOORS database for specific requirements.
- Link Rational DOORS objects to Windchill documents and parts.
- Add Rational DOORS objects to Windchill baselines.
- Integrate the Windchill Change2 system.
- Create Rational DOORS change proposals from the Windchill user interface.
- Trace bidirectional links created in Rational DOORS back into Windchill.
- Leverage the Windchill Access Control, Discussion and Action Item framework.
- Rely on Windchill container-based access control.
- Access traceability lists of where Rational DOORS requirements are used within Windchill.



## About Stoneworks Software Corporation

Stoneworks Software Corporation creates standardized tools to address the growing business challenges in the product lifecycle management (PLM) arena. Located in Lanham, Maryland, this privately held company focuses on helping organizations increase the efficiency and quality of configurations management, requirements management and PLM processes. Leading aerospace and defense organizations around the world rely on Stoneworks Software Corporation tools, as do companies in the automotive, electronics and medical industries.

## For more information

To learn more about the Ambassador Delegate for Windchill solution, contact your Rational DOORS sales representative or Stoneworks Software Corporation, or visit:

[www-304.ibm.com/jct09002c/gsdod/solutiondetails.do?solution=36027](http://www-304.ibm.com/jct09002c/gsdod/solutiondetails.do?solution=36027)

or

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