

# THE SYNTHESIS PLATFORM®



Reliability Analysis Platform,  
Knowledge Repository and  
Intelligence Center

Synthesis is an integrated reliability platform that can unite any or all of ReliaSoft's best-in-class reliability engineering applications into a **powerful, easy-to-deploy, enterprise-capable, integrated reliability solution.**

This powerful platform is built-in to Weibull++, BlockSim, Xfmea and all other Synthesis-powered desktop applications. It provides **intelligent integration** between reliability program activities and tools, while simultaneously facilitating **effective information sharing and cooperation** between engineering teams of any size.

The end result is the ability to maximize the efficiency and effectiveness of reliability activities, which results in **time savings, agility and reductions in both time-to-market and cost**, while **maximizing the achieved reliability and associated ROI**. That's the power of the Synthesis Platform!

syn·the·sis

noun (from Greek σύνθεσις)

1. The combining of separate elements or substances to form a coherent whole.
2. The act of combining separate ideas, beliefs and styles, etc.

<http://Synthesis.Reliasoft.com>

## INTRODUCING THE SYNTHESIS PLATFORM

The Synthesis Platform is the result of a multi-year R&D effort focused on developing the right processes, analysis tools and IT framework to synthesize discrete reliability activities into a **continuously self-improving reliability program** with significant contributions from each activity.

Designed to address the feedback and needs expressed by thousands of reliability practitioners in virtually every industry, the platform leverages classical reliability engineering methodologies and existing best practices coupled with a **new and intelligent approach to integration**.

### **Eliminates "Islands" of Information**

In today's dynamic and knowledge-driven business world, data and information sharing are essential for innovation and improvement in products, services and processes.

Without an effective infrastructure in place to facilitate collaboration between engineers with different responsibilities and subject matter expertise, too many organizations face the problem of disconnected "islands" of reliability information that limit their ability to meet and exceed reliability and productivity goals.

The Synthesis Platform eliminates these barriers by providing a **structured, flexible and secure back-end database** that promotes information sharing between teams of any size, with related or different subject matter expertise, and coming from the same or different organizational units.



### **Facilitates Effective Collaboration Between Subject Matter Experts**

Data sharing in itself does not guarantee that the information will be used correctly and effectively by everyone involved. When the organization employs different subject matter experts for different reliability activities, how do you ensure that the often complex information and knowledge shared by one expert will be understood and used appropriately by other practitioners who need it?

The solution is the **revolutionary object-based reliability modeling (OBRM)** concept pioneered by ReliaSoft, which hides activity-specific complexity while exposing what is useful for others to leverage. Each application "knows" what information to provide to other activities, as well as how to use the information it receives.

### **Intelligent Integration Without Sacrificing Analytical Power**

Traditionally, software integration has meant that a certain amount of core functionality was sacrificed or at least compromised. That is certainly not the case with the Synthesis Platform.

Individually, all of ReliaSoft's Synthesis applications continue to stand out as the **most powerful, functional and user-friendly reliability software on the market**. When used together, they retain their own unique strengths while leveraging relevant information from the entire suite of products to achieve an integrated solution that truly is **greater than the sum of its parts**.



# ***AN INTELLIGENT, SCALABLE, EVOLVING PLATFORM FOR RELIABILITY***

## ***Automatically Builds a Reliability Knowledge Repository***

At the same time that the Synthesis Platform is facilitating information sharing and collaboration for ongoing projects, the system is simultaneously building a **secure, permission-based and searchable** corporate repository of reliability knowledge.

The data, analysis and lessons learned that are captured by the repository can be accessible to engineers throughout the organization. This provides a huge head start on future projects by making it easy to **reuse and build upon** existing information.

This instant access to versatile, organization-wide reliability data provides a strong foundation that will not only **save a tremendous amount of time**, it will also **greatly improve the outcome of future projects**.

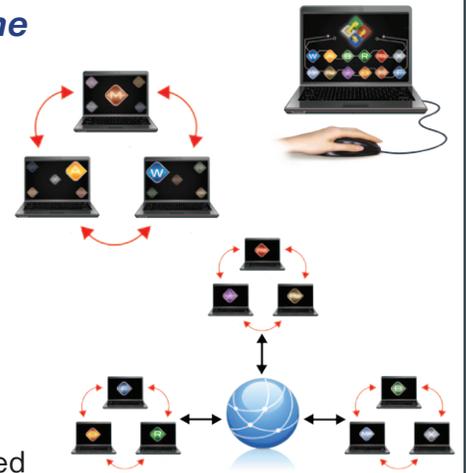
## ***Robust & Scalable Architecture:***

### ***Single-User, Multi-User or Enterprise Deployments in One***

The Synthesis Platform and desktop applications were designed from the ground up to be "connection aware" and to adapt automatically to single-user, multi-user and enterprise configurations.

The exact same software solution that you might deploy for a single reliability engineer on a single computer can be scaled to a global enterprise with thousands of engineers on a server farm functioning as a corporate repository. This provides both **complete deployment flexibility** and, best of all, **true scalability**.

The full functionality is available with every license type (you do not need to purchase a special "enterprise license"). Both SQL Server® and Oracle® enterprise database platforms are supported; users can also share the platform's built-in standard repositories through their own networks with no special configuration required.



## ***APIs for Data Transfer with External Systems***

The Synthesis Platform includes a rich set of Application Programming Interfaces (APIs) to connect Synthesis applications and data with other systems and tools used within your organization. You can use the APIs transfer data to or from a variety of different PLMs, ERPs, CMMS and other external systems.



## **SYNTHESIS API**

## ***Built by Reliability Engineers for Reliability Engineers:***

### ***A Revolutionary Reliability Solution That Will Continue to Evolve***

The groundbreaking new features and robust enhancements of the Synthesis Platform are just the latest chapter in ReliaSoft's 20+ year history of innovation and support for engineers engaged in reliability activities throughout all stages of the product life cycle.

Our commitment to continuous investment in R&D and our focus on developing practical solutions means that you can expect to see even more result-driven concepts and innovative additions to the Synthesis Platform for years to come.

