



# The SurePower Innovation<sup>®</sup> Øæ ^, [ !\ ÁTechnology Advantage

# The SurePower Innovation Technology Advantage

## An ISCS White Paper

SurePower Innovation, ISCS's latest release of its insurance automation solution, extends the feature set of SurePower 2000® on a new foundation of state-of-the-art technology. New technology is wonderful thing... if it provides a tangible business solution. ISCS business solutions have always been innovative and this requires that the underlying technology be at the same level. These technology choices are an important consideration for insurance organizations evaluating their automation options.

While SurePower Innovation's insurance processing features and capabilities are easy to see, it is more difficult to look "under the hood" at the engine powering the system. But it is important to go beyond kicking the tires to learn why a system's technology fits your organization's needs. This white paper gives you that look under the hood of SurePower Innovation, and explains the benefits of the technology choices ISCS has made.

ISCS used SurePower Innovation Framework (SPiFW) for the development of SurePower Innovation. SPiFW is a Java-based software development workbench. It adheres to ISCS "philosophies" that system development components must be the following:



- Solidly Robust
- Easily Supportable
- Extensible
- Future-proof

In considering the above, ISCS applied the following detailed criteria that their clients need now or that they will need in the near future:

- **Accessibility.** Systems must be accessible everywhere in the world by whoever needs the information. A Web-based Internet solution is the best way to provide this access.
- **Security.** Company information and privacy is critical. The technology must be secure.
- **Choice of Vendors.** Vendor lock-in limits options. ISCS customers prefer to choose their vendors, so the technology should not lock them into one platform.
- **Scalable.** Companies are all sizes, some are growing rapidly, and M&A activity can quickly change business needs. The technology must be scalable in price and performance.
- **Change Friendly.** Change is not only expected it's welcome. The technology must make customizing the system easy and must support customized software installations.
- **Integration-Directed.** Tight integration with other systems and data sources is becoming a requirement, not a luxury. The technology must be built on industry standards for ease of integration.
- **Modular.** Systems that ISCS clients require are enormous, many having more than a million lines of code. The technology had to be sufficiently modular for a developer to be productive without being an expert on the entire system.
- **Workgroup Friendly.** Teamwork and collaboration are core ISCS philosophies. The technology had to have integrated source management with strong teamwork and collaboration control.
- **A Complete Workbench Toolset.** Technology tools are more than just a programming language. The technology had to be a complete workbench with a development methodology, a set of techniques for successful project completion, and an extensive library of reusable code.



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SPiFW conforms to J2EE standards, allowing development of a state-of-the art standards-based environment. SurePower Innovation is a 100% pure Java-based application that will run in any standards-compliant J2EE container. Java is a widely accepted programming language with over 3 million users and a vast network of support, information and help resources. Based on open standards, Java runs on all major manufacturer equipment and operating systems. Java allows companies using SurePower Innovation to avoid vendor lock-in. Java also enables system extensibility, capably scaling from mobile phones to mainframe computers.

SPiFW uses three principal architectural approaches that allow it to meet ISCS's development standards reflected by the philosophies and criteria above. These are Model-Driven Architecture, Services-Oriented Architecture and Model-View-Controller Architecture.

Below are each of the underlying architectural technologies for SurePower Innovation and why they are an important part of ISCS's business solutions:

<p><b>Model-Driven Architecture</b></p>	<p>A Model-Driven Architecture (MDA) uses meta-language techniques, or models, to describe business problems along with their proposed solutions. Business models typically consist of a graphical view of data, requirements and system interactions. SPiFW reads business models directly and dynamically creates business systems based on the model.</p> <p>Changing the business requires changing the model graphically. SurePower Innovation can even evaluate changes and adapt automatically to new requirements. Since no knowledge of the underlying system's technology is necessary to develop and change business models, MDA is a one way SurePower Innovation maintains <i>extensibility</i> in the face of rapid business change.</p>
<p><b>Services-Oriented Architecture</b></p>	<p>A Services-Oriented Architecture (SOA) partitions application models into self-contained business services based on standards. Each service runs as an independent business unit with no dependencies on information storage or other business services.</p> <p>By using XML and open industry standards, SurePower Innovation modules are completely plug-and-play with other modules, and systems and can easily interface to other vendors' products and services. SOA gives SurePower Innovation its modularity for ease of maintenance and an industry standard way to <i>easily interface</i> with other systems and services.</p>
<p><b>Model-View-Controller Architecture</b></p>	<p>A Model-View-Controller Architecture (MVC) prescribes centralized control and command of all application features and presentation. By design, all business modules and their logic are stored centrally but separately from the devices used to access them.</p> <p>In other words, MVC allows SurePower Innovation users to access critical business functionality from almost anywhere using browser-based HTML forms, Adobe PDF forms, and even wireless devices such as cell phones and PDAs.</p> <p>MVC's central control of security features prevents unauthorized access to sensitive data.</p>



In addition to the advantages of the architecture, SPiFW has several other features that fulfill ISCS requirements:

<b>Tightly Integrated Development Environment</b>	SPiFW combines a growing suite of tools and techniques to give the developer a totally integrated development environment (IDE) experience. Distributed <i>team</i> development is highly emphasized and the IDE leverages the advantages of SPiFW's three architectural technologies: MDA, SOA and MVC.
<b>Robust, Ready-to-Use Functionality</b>	SPiFW comes with a large, highly developed <i>library of modules</i> for developing and integrating business solutions. XML, Web services and vendor-neutral database management are just a few of the core feature areas.
<b>Integrated Run-Time and Support Tools</b>	SPiFW comes with a strong run-time environment, including detailed logging and customer support information. When a problem is encountered, support personnel can take a snapshot of the item being worked on and copy it to a test environment where they can reproduce the issue and help the user. The system can even be configured to <i>proactively</i> (without user intervention) notify support personnel of run-time issues.
<b>Integrated Testing Tools</b>	SPiFW comes with a framework for <i>automated system and regression testing</i> . All business functionality is developed with associated test utilities that run automatically on a regular schedule. Test results are gathered and formatted for easy readability; issues are reported automatically to system administrators.

SPiFW contains the answers to all of ISCS's technology requirements. It gives SurePower Innovation a technological superiority to match its functional superiority. The base architecture is state-of-the-art, capable of powering SurePower Innovation and its users into the future.



## State-of-the-Art is Not a Luxury

"State of the art" means more than bragging rights... when you have made the right technology choices. The costs of being "behind" in technology are difficult to quantify but very real. Costs arise when your system can't communicate with other systems and someone must convert data. Costs arise when a glitch in a line of code in your accounting system brings down your underwriting system. Costs arise when your staff must drop everything else to gather data from several systems for a quarterly report. If the report is late—more costs.

A tendency when reviewing advanced IT technology is to look at it as a gift to the IT department. While the right tools will make your IT staff smile, those who use the system to do the insurance processing will realize tangible benefits from a system built on reliable, capable and agile technology.

## Technology Choices are Business Choices

The technology choices underpinning the automation solution you choose can also set the tone for your business processes. The wrong technology choices can make your business the proverbial square peg made to fit in a round hole. The choices ISCS has made for SurePower Innovation enable a business philosophy that values

- determining its own business processes,
- responding to change,
- working as an integrated team, and
- dividing and conquering tasks efficiently.

There is more than one technology vehicle for automating your insurance processing. Every technology does not further the above goals. ISCS has the keys of insurance expertise and has built SurePower Innovation on a solid technological engine.

After this look under the hood, call ISCS for a test drive.