



# Ultimate Risk Solutions

Powerful,  
Flexible,  
User Friendly

## NEW EDITION OF RISK EXPLORER™ FOR MID SIZE AND SMALLER INSURANCE COMPANIES

Ultimate Risk Solutions recently introduced a new product, Risk Explorer™ Express Edition, to meet the needs of mid size and smaller insurers and reinsurers. The Express Edition incorporates many features of Risk Explorer™, the Dynamic Financial Analysis tool used by leading insurers, reinsurers, and brokers but with a simplified set of features tailored to the specific needs of small and mid size insurers.

"We listened to prospective users of internal capital models and learned that there is strong demand on the part of many smaller and regional companies for a cost-effective model as they develop Enterprise Risk Management Programs to meet rating agency and regulatory standards. However, these users do not require the extensive functionality needed for large companies that build much bigger and far more complex models," Alex Bushel, URS CEO explained.

Risk Explorer Express Edition provides small and middle market companies an affordable tool for portfolio modeling, regulatory compliance, reinsurance analysis, economic capital estimation and allocation, financial statement modeling, and projections, among other features.

"Companies who previously thought that due to complexity or excessive cost, an internal capital model was unobtainable in the short term and perhaps medium term under Solvency II, can now look to develop their own models, perhaps in conjunction with their chosen consultants who can also license the software," Bushel pointed out.

Unlike other offerings in this area that are greatly reduced versions of a large platform or "audit only" versions, Risk Explorer Express Edition is a fully specified, integrated asset liability modeling platform designed specifically for smaller and mid size companies," he reported.

### RISK EXPLORER™ FROM ULTIMATE RISK SOLUTIONS, LLC

Risk Explorer™, is today's leading Dynamic Financial Analysis modeling software used by insurers, reinsurers, brokers, and government agencies worldwide. Risk Explorer™ is faster than competitors' products. It's easier to use. It can be learned in two days. Large models can be built in minutes.

### ULTIMATE RISK SOLUTIONS NAMES O'GORMAN TO HEAD SPANISH, PORTUGUESE, LATIN AMERICAN OPERATIONS

David O'Gorman has been named to head URS operations in Spain, Portugal, and Latin America, Alex Bushel, Chief Executive Officer, announced.

Based in Madrid, O'Gorman will be responsible for business development. He came to URS recently from Aon Benfield where he had headed analytics services to clients throughout Latin America. O'Gorman is an Associate of the Institute of Actuaries and holds a Bachelor of Science degree in Applied Mathematical Sciences from Dublin City University.

He is available to consult with insurers and reinsurers in his territory and to demonstrate URS products.

### HOW WILL SOLVENCY II AFFECT INSURERS THAT WANT TO DO BUSINESS IN EUROPE?

In a recent Best's Review article, Senior Associate Editor Ron Panko wrote that no major company or nation anywhere in the world can be expected to avoid the impact of Solvency II.

The new regulations will standardize capital requirements among all 27 members of the European Union when implementation is completed at the end of next year. The new rules will replace the Solvency I regime developed in the 70s and early 80s. They will directly impact overseas subsidiaries of EU companies doing business in other parts of the world and are expected to provide competitive advantages to larger European companies.

Regulatory regimes outside the EU may be granted equivalency status so that their companies may compete in Europe. All the world's major insurers are taking steps to handle the new regulatory environment, he wrote.

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## RISK EXPLORER EXPRESS EDITION™ – THE PRODUCT

Risk Explorer Express Edition™ is a Dynamic Financial Analysis software solution created to address the modeling needs of smaller insurance and reinsurance undertakings. Like all products from URS, Express Edition is also available to brokers, intermediaries, and consultants.

The Express Edition incorporates many features of Risk Explorer but with a simplified set of features tailored to the specific needs of smaller undertakings. Hence, companies with less complicated risk sources can still develop complete business models using a fully integrated asset liability modeling application.

### Integrated Solution – Not a Tool Box

Risk Explorer Express™ is not a programming environment or 'tool box' where you have to painstakingly connect together all the various components of your model and maintain this over time. Instead, all the standard financial statements such as underwriting profit and loss accounts, balance sheets, income statements, and cash flow statements are created automatically once an asset or risk source is defined and simulated.

The aggregate distribution of each component within a financial statement such as underwriting profit or change in annual surplus can be gathered and reviewed either within Risk Explorer Express™ or another application such as a spreadsheet or text file.

Risk Explorer Express™ retains the Economic Environment module as deployed within Risk Explorer™ and enables use of economic scenarios provided by URS Real World™ or indeed other ESG output providers. The creation of a fully integrated asset liability model where changes in an economic index or driver can affect the quantum or timing of a liability cash flow is now within the reach of smaller insurance and reinsurance undertakings.

Risk Explorer Express™ allows the output from Catastrophe event files (RMS, AIR, and EQECAT) to be included in the aggregate modeling of an undertaking and also allows the user to assess the effects of different possible reinsurance structures on a gross portfolio. Other property casualty specific features of a business are handled such as ALAE and ULAE. Similarly, modeling accident years as opposed to underwriting years is possible.

### Solvency II Compliant

Smaller insurance and reinsurance undertakings may consider that under a Solvency II regime, a fully deployed internal model may be too costly and complicated to consider implementing. With Risk Explorer Express™, these fears are easily allayed. Risk Explorer Express™ has been created with a feature set that will ensure that the models will become part of the day-to-day risk management and business planning processes within an underwriting organisation.

### Available to Consultants and Advisors

Additionally, Risk Explorer Express™ is available to consultants and advisers on a flexible short-term licensing basis where a client requires advisers to have full access to their models. Unlike other offerings where only a limited or restricted "audit only" version of a product is provided, the full working version of Risk Explorer Express™ can be licensed by a consultant or advisor thus enabling the client to benefit from having the assistance of a regular and familiar consultant.

Models developed in Risk Explorer Express™ can be transferred to Risk Explorer™ as required.

### A WORD ABOUT URS

We're independent financial software developers. We believe clients are best served by a DFA software product that is not tied to a reinsurance broker or to a consulting company for which the brokerage and/or consulting revenues are the main priority. Our sole commitment is to develop the most advanced software and to provide these products to our clients along with training and support services.

Risk Explorer™ is the Dynamic Financial Analysis tool used by insurers, reinsurers, brokers, and government agencies worldwide. Risk Explorer™ is faster than competitors' products. It's easier to use. It can be learned in two days. Large models can be built in minutes. For mid-size and smaller companies, we've just introduced Risk Explorer Express Edition designed specifically for this important market sector. Express Edition provides the analytical tools these companies need for business planning and risk evaluation at an affordable cost.

Rating agencies today expect companies large and small to have Enterprise Risk Management Programs that evaluate all the risks they face. Risk Explorer™ and our new Express Edition are the Dynamic Financial Analysis tools best qualified to meet these requirements.

If you're doing business in the European Union, you'll have to comply with Solvency II, the new regulatory regime that goes into effect in October next year. Risk Explorer™ is the DFA designed to meet Solvency II requirements, so give us a call.

**Alex Bushel**  
*Chief Executive Officer*

### TRAINING

The combination of analytical power and user-friendly interface enables new users to build complex models in Risk Explorer™ with just a few days of training. All new users receive hands-on training from our experienced staff. We are always available to provide ongoing training in targeted areas for our users. Anytime you want to explore alternative methods for building models, we provide tutorials or live training over the Internet. Risk Explorer™ comes with a built-in user manual and context-sensitive help that provides great resources for understanding specific calculations and methodologies.

## HOW DOES RISK EXPLORER™ COMPARE WITH OTHER MODELS?

By Patrick Grealy

URS Managing Director - Europe

There are essentially two approaches in general use to creating a computer program for modeling the Assets and Liabilities of an insurance or reinsurance company. These can be summarised as: The Special Programming Environment (or 'Toolbox') approach; and the fully integrated Compiled Program. Each has advantages and disadvantages. At URS we believe the fully integrated approach is best due to the greater structure it gives to this important process but also for a few more key reasons.

### How Do the Two Approaches Differ?

#### Tool Box Approach

The Special Programming Environment can almost be described as a "do it yourself" or DIY approach where the user assembles the components of the company from a set of modules. Persons familiar with spreadsheets know that they can link together selected cells and format them as they please. Also, spreadsheets contain some pre-programmed functions that can be used to add more sophistication and improved functionality, repeating tasks and calculations as needed.

Some Toolbox-type software products that help (re)insurance companies create their Asset-Liability models require users to program each component or some components in the model using their built-in scripts or programming languages. Other Toolbox products go a stage further in that they offer some pre-built components that are specific to risk modelling such as frequency and severity modules, Cash Flow Vectors and other insurance related modules. However, the user needs to specify how these components link together so as to create the overall Company. Standard insurance financial statements also need to be assembled. The visual representation of these models is usually of the form of boxes and nodes connected via a series of arrows to represent the relationship between the various sections.

An advantage of this approach is that a small model used to look at a few lines of business can be created, by an experienced user, in a free format without much structure, which presumably allows for modeling flexibility. Also an experienced user who succeeds in creating a large and complex model will certainly know how the model is built and will derive great satisfaction from having achieved the end result. However, therein lies the significant disadvantage of a 'toolbox' approach.

#### Integrated Approach

URS favors the integrated approach that is deployed in Risk Explorer™. It allows the user to focus on the parameters of the risks within their business and not worry about having to link components together, not to mention having to program those components, to produce simulated Company-wide financial statements and other standard outputs. Once the parameters of a company's risks, assets and ceded or assumed reinsurance contracts are entered into the model, the simulation can immediately produce the resulting income statements, balance sheets, profit and loss accounts, cash-flow statements, and other required outputs.

Moreover, the calculations of items such as net-of-reinsurance results, required solvency capital, and allocation of such capital, all happen automatically as do admin items such as currency conversions, discounting, and consolidation from a LoB or segment level.

Some integrated approaches suffer from lack of flexibility that a toolbox offers, but Risk Explorer™ does not have these problems because of the patented technology contained in URS Translator for Excel. Using this technology, any nonstandard form of asset, reinsurance structure or risk source can be specified in the familiar environment of Microsoft Excel and then "translated" into compiled code for use within Risk Explorer™. Indeed, we believe there is no structure so complex that it cannot be integrated into Risk Explorer™ using an Excel sheet as a composition tool.

Ability to expand the standard features of the software by compiled Excel spreadsheets gives Risk Explorer™ flexibility that, in fact, is much greater than the flexibility offered by toolbox products. That is because nothing is more flexible than Excel. Any Excel model, at the click of a button, can become a natural, compiled extension of Risk Explorer's functionality.

#### The integrated approach offered by Risk Explorer™ has these significant advantages:

- Integrity of model
- Speed of execution
- Speed of model building
- Ease of learning
- Powerful pre-built point-and-click functionality
- Scalability to very large sizes
- Complete set of documentation
- Ease of audit and understanding;
- Controlled access to environment within a Company structure
- Integration within an existing IT infrastructure
- Continuous improvement & support from a professional software Company.

The integrated approach is an industrially stronger and more robust method for creating company models. Risk Explorer™ combines all the above listed advantages offered by the integrated approach with all the flexibility of Excel. To have a choice between two different approaches is good. Each may appeal to different users with different needs. However, at URS we believe the rigorous requirements of performing internal modelling by insurance and reinsurance companies for statutory and rating purposes is easier to achieve and more cost effective using the integrated approach.

## MAINTENANCE AND UPDATES

We release a new version of Risk Explorer about every six months. These updates include new features that are immediately available to all users. The documentation is updated to account for the changes and an accompanying document is included which details all changes made to the system. The software is delivered via the secure downloads section of our website.

## TEN QUESTIONS YOU SHOULD ASK ABOUT DFA

### 1. What is dynamic financial analysis – DFA?

DFA is an analysis of the financial results of a company under a large number – hundreds of thousands – of possible outcomes simulated by fast computers. Each simulated outcome produces the values of all unknowns of the company: insured losses, investment returns, defaults of counterparties, and others.

### 2. More and more insurers and reinsurers are using financial modeling software. What are the key drivers behind this?

Human desire for knowledge is the main driver. Financial modeling means better knowledge about what can happen to a company and how to make it safer and more profitable. Regulators and rating agencies today expect companies to use models to identify and quantify risk. For them, a company that is seriously implementing financial modeling is a company that is better aware of its risks and ultimately a better managed company. Explosive growth of computer technologies over the last couple of decades, both hardware and software, certainly is one of the most important developments driving the increased use of models. Dynamic financial analysis is only possible on fast, modern computers using the latest accomplishments of software engineering.

### 3. What about the growth in popularity of enterprise risk management (ERM) and the role of dynamic financial analysis in ERM?

Discussions about ERM began in the mid-1990s. At the beginning, it was more of a theoretical exercise, but as computers grew faster and senior company management became more aware of the benefits of DFA, overall acceptance of the concept within the insurance/reinsurance industry grew rapidly. Regulatory pressure to adopt financial modeling began with FSA in the UK and continued with regulators in Europe, the US, South Africa, Australia, and other parts of the world. Rating agencies followed. The result was an environment where companies that are still skeptical about DFA are viewed more as the ones lagging behind the industry.

### 4. How can financial modeling software help insurers and reinsurers in Europe prepare for the new Solvency II regime that is due to be effective in October 2012?

Solvency II explicitly requires companies to implement internal ERM models. Financial modeling software helps companies comply with that requirement much faster. Without the ready-to-use software, companies would have to write such software themselves. Most of them do not have the resources or desire to do so.

### 5. What lessons with regard to modeling and risk management can the insurance industry learn from the banking crisis that broke out in September, 2008?

First, companies should look more carefully at where they invest. Second, companies need to be able to evaluate the overall impact of economic downturns, whether from the banking crisis or other developments that could impact their business.

### 6. How does Risk Explorer™ contribute to strategic decision making?

Risk Explorer™ allows companies to create their risk portfolios quickly and efficiently, including insurance risks, assets, and counterparties (reinsurers). Risk Explorer™ also allows companies to evaluate the impact on the portfolio of economic changes. Once all the risks are included in the portfolio, one can quickly run large numbers of simulations to produce a spectrum of outcomes for financial results. Then, various strategic decisions, such as reinsurance purchase, asset allocation, portfolio composition, and business growth can be applied to all simulated scenarios. This enables management to determine the best business strategy.

### 7. Most insurers and reinsurers are very conservative investors who prefer to take risk on the liability side of their balance sheets. How can financial modeling software help them manage the underwriting risk and prepare for the next Hurricane Katrina or asbestos?

In a good portfolio model, some of the simulated scenarios will produce large losses such as those from the hurricanes or asbestos. Financial modeling software can help companies design efficient strategies to deal with such adverse loss scenarios; for example, through purchasing reinsurance or through financial risk transfers.

### 8. Consolidation and globalization mean that many of today's insurance and reinsurance companies are large multinational businesses. How can DFA help coordinate and manage risks across such organizations?

DFA can help companies manage the risks of each subsidiary and then combine those risks to create a global portfolio. This will enable them to evaluate various global strategies that may benefit the large multi-national organization but would not be possible to evaluate at the subsidiary level. Also, large multi-nationals are exposed to exchange rate risk. A good DFA model for companies of this type should include exchange rate risk.

### 9. The insurance industry has sometimes been slow to embrace new technology and paperless ways of doing business. Have you witnessed a change in the industry culture in recent years?

As dynamic financial analysis has become more and more sophisticated over the last decade, the culture is changing and companies are embracing new technology.

### 10. Where do you see the insurance and reinsurance industry in five years' time, and how prevalent will DFA modeling be at that point?

DFA models will become "must haves" in all insurance and reinsurance companies. DFA modeling will likely expand into asset-liability management where assets and liabilities have historically been managed separately. Business decisions in most insurance companies will be made with the results of a good DFA model as one of the inputs.

## WHAT THEY'RE SAYING ABOUT RISK EXPLORER™

*"The product always somehow manages to exceed expectations. Well done. We will certainly remain a loyal client."*

**Guy Cloutier, FCAS, FCIA** | Chief Actuary, American Safety Reinsurance, Ltd.