Touchstone APIs

**HIGHLIGHTS**

Touchstone APIs enable you to leverage functions within Touchstone's analytics modules—Data Quality, Hazard, Geospatial, and Detailed Loss—to:

- — Tailor risk management applications to meet your company's specific business needs
- — Expand the application of AIR's catastrophe modeling within the enterprise, while reducing training requirements
- — Embed catastrophe modeling directly into an existing risk management workflow

By integrating tools and analytics from Touchstone® into the internal applications you use every day, you can improve resource allocation efficiency and maintain full control over your risk management workflow.

Application Programming Interfaces (APIs) are the critical components to building these integrated systems, as they serve to connect vendor applications to internal ones. Touchstone APIs are based on service-oriented architecture (SOA) and facilitate the development of enterprise applications as modular business services that can be easily integrated and reused, creating a truly flexible, adaptable risk modeling infrastructure.
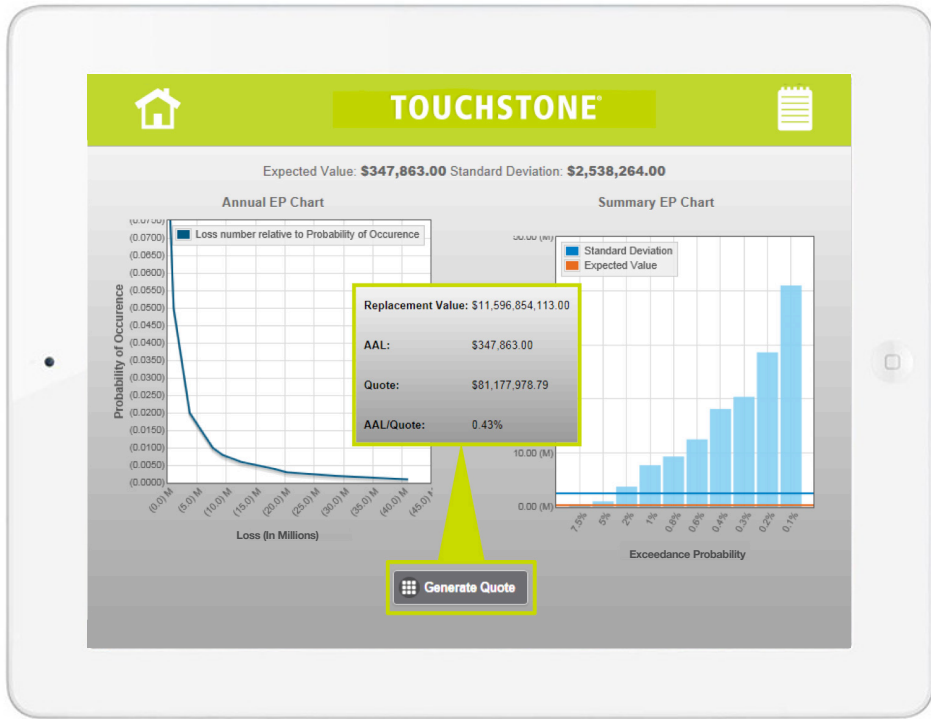
Example of a custom mobile application developed using Touchstone APIs

TOUCHSTONE APIs

Implement a Multi-Model Loss Analysis Workflow

For a company that wants to obtain alternative views of risk from multiple vendors and internally developed ones, implementing a multi-model workflow can pose many challenges. Having users learn and interact with multiple systems can be time consuming, and manual entry and transfer of data and results can lead to mistakes and associated re-work.

Touchstone APIs enable you to build a single, unified platform that can seamlessly manage all of your exposure databases, generate losses from different models, and consolidate all your results in one location. Touchstone's **Import API** adds exposure and account data from your exposure management systems. **Loss Analysis APIs** then allow you to select settings such as peril, event set, and output options to kick off the desired catastrophe analysis. The **Get Loss Results API** delivers analysis results to the custom platform, where they are displayed. Throughout the process, the **Activity Monitor API** tracks and displays the progress of the analyses.

These tools allow your analysts to focus on managing risk, instead of the redundancy and inefficiency of inputting the same data into separate systems.

Beyond Loss Analytics: Automate Pricing Policies

Many pricing functions performed by Touchstone's analytical engine can be programmed via APIs into tailor-made systems, resulting in significant productivity improvements.

For example, an insurance company that uses Touchstone's average annual loss (AAL) results as an input to their pricing formulas can develop a solution that generates quotes on the fly. Normally, the insurer would have to export modeled loss results and manually input the AAL values into the pricing system. Touchstone APIs seamlessly move this workflow to the back end, allowing underwriters to provide a more efficient service to their customers.

You can also automatically import exposure data with the **Import API**. Once the data is imported, you can take advantage of the **Data Quality Analysis API** to evaluate the completeness and reasonability of your exposure data. Company-specific rules can even be created to automatically augment the exposure set when data are missing or confidence in the existing data is low.

Touchstone APIs also facilitate portfolio management by scheduling various types of analysis to be performed on a periodic basis as defined by business needs. For example, a European insurer can use the **Geospatial Analysis API** to automate accumulation analysis by country and CRESTA zone or by historical or Lloyd's Realistic Disaster Scenario (RDS) events. A U.S. insurer might set up guidelines (i.e., distance to coast, storm surge potential, or distance to 500-year floodplain) to assess location-level hazards by leveraging the **Hazard Analysis API**.

Optimize Sensitivity Analysis

Touchstone's **Loss Analysis API** enables you to run multiple loss analyses simultaneously. You can increase productivity and better understand the risk profile of your portfolio by setting up a series of analyses, each with a different set of input options (event sets, perils, and financial settings) and exposure or loss options.

For example, you can use Touchstone APIs to automate loss analyses for both the standard and warm sea surface temperature (WSST) catalogs for Atlantic hurricanes to understand the sensitivity of losses with the two views of risk.

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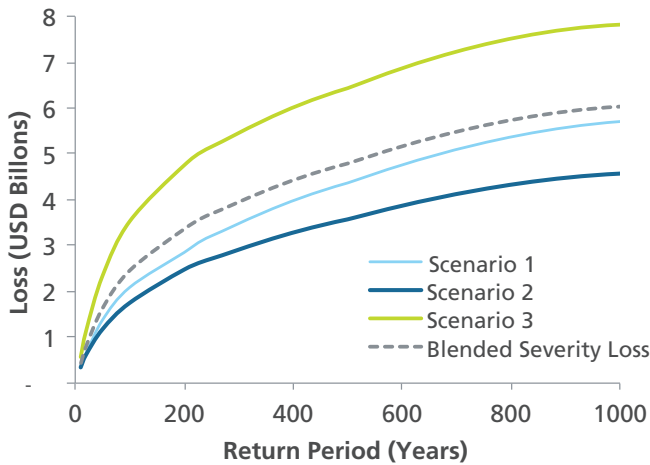
Customized graphs can be created to display sensitivity analysis results

Democratize Catastrophe Analysis Across the Organization

For those who do not use catastrophe modeling software on a day-to-day basis, the amount of training needed to achieve the necessary level of comfort with catastrophe modeling applications is time and resource intensive. Touchstone APIs offer a way to develop a simplified application to provide only the functions that your company is interested in, while granting greater access to catastrophe modeling results across the company. For example, mobile applications can be developed for executives on the go who want real-time access to analysis summaries from Touchstone. A simplified application can also be implemented to decrease the time it takes for new users to get up to speed. Options like these give re/insurers increased flexibility and control over their risk management workflow.

The applicability of Touchstone APIs extends far beyond the use cases described here. With the tools AIR provides, developers can apply their expertise and imagination toward creating whatever integrated solution best meets their company's needs.

AIR'S TOUCHSTONE DEVELOPER ZONE—ALL THE TOOLS YOU NEED IN ONE PLACE

Software developers seeking to extend the functionality of Touchstone using licensed APIs can take advantage of AIR's online Touchstone Developer Zone. Here, you can access AIR's software development kit and all the tools needed to begin integrating Touchstone's functionality, including:

— Database reference guides with information on Touchstone's open schema
— Reference manuals that explain the capabilities of each API and detailed descriptions of syntax and input/output requirements
— Libraries containing web service proxies and shared value objects for all Touchstone service types
— Code samples that can serve as templates for developers to build upon
— Release notes describing the API features and updates released with the latest version of Touchstone

To learn more, please contact your AIR representative or visit us at: http://www.air-worldwide.com/ Software-Solutions/Touchstone/

ABOUT AIR WORLDWIDE

AIR Worldwide (AIR) provides risk modeling solutions that make individuals, businesses, and society more resilient to extreme events. In 1987, AIR Worldwide founded the catastrophe modeling industry and today models the risk from natural catastrophes, terrorism, pandemics, casualty catastrophes, and cyber attacks, globally. Insurance, reinsurance, financial, corporate, and government clients rely on AIR's advanced science, software, and consulting services for catastrophe risk management, insurance-linked securities, site-specific engineering analyses, and agricultural risk management. AIR Worldwide, a Verisk (Nasdaq:VRSK) business, is headquartered in Boston with additional offices in North America, Europe, and Asia. For more information, please visit www.air-worldwide.com.

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