GUIDEWIRE

Overview

Guidewire Cyence for Cyber Risk Management is a cloud-native, economic cyber risk modeling product that is built to help P&C insurers quantify cyber risk exposure in losses and probabilities. Leaders across the insurance industry use Cyence for Cyber Risk Management to prospect, underwrite, price profitable cyber risks, and manage portfolio exposure accumulations to develop new cyber products with confidence.

Benefits

- **Improve risk selection to avoid adverse selection**
- **Overcome the data collection and management challenges**
- **Address pricing adequacy to protect profitability**
- **Monitor portfolio health to avoid or reduce losses**
- **Develop cutting-edge cyber products**

Features

- **A highly sophisticated platform that is currently in its fourth-generation model enhancement**
- **Collection and curation of real exposure data at internet scale across 45+ risk factors**
- **Precise predictive modeling for frequency, severity, and likelihood of cyber incidents**
- **Out-of-the-box scenario library**

Guidewire Cyence for Cyber Risk Management

> **Measure the financial impact of cyber risk with the most comprehensive cyber risk modeling product built for P&C insurance.**

Overcome the Unprecedented Challenges for New Growth

Man-made disasters like cyber-attacks are different from known insured catastrophes such as hurricanes and earthquakes, for which insurers can rely on authoritative data sources such as the United States Geological Survey or the United Kingdom's Met Office. Without the benefit of substantial loss history to build traditional actuarial pricing models, insurers must depend on subjective information from the insured—like high-level questionnaires and discussions about what security technologies and protocols are in place—to manage cyber underwriting and accumulation.

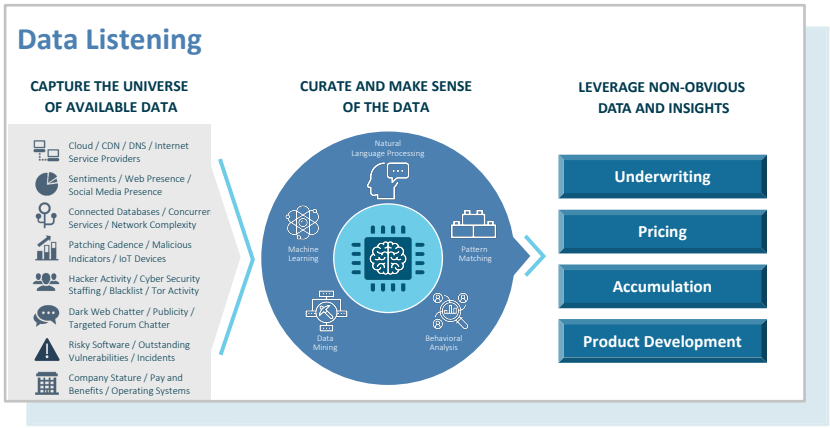
What's uniquely different about cyber risk is that it is stealthy, changes often, and is constantly evolving. Cyber risk involves active adversaries who deliberately seek high-value and opportunistic targets and change their approaches based on observed security defenses. To analyze the likelihood and impact of cyber risk, insurers need to examine both the motivation of a potential attack and the susceptibility of the insured to an attack.

Cyber risks call for better tools for underwriting, pricing, and management. **Guidewire Cyence for Cyber Risk Management** measures cyber catastrophe exposures in losses and probabilities by modeling the shifting threat landscape attributed to cyber motivation and susceptibility.

> **"Cyence is part of the economic modeling process that combines the best of Marsh's experience as well as partnerships around the globe, to help drive superior economic models for clients to understand their particular cyber risk environment."**
>
> **–Tom Reagan, US Cyber Brokerage Practice Leader, Marsh**

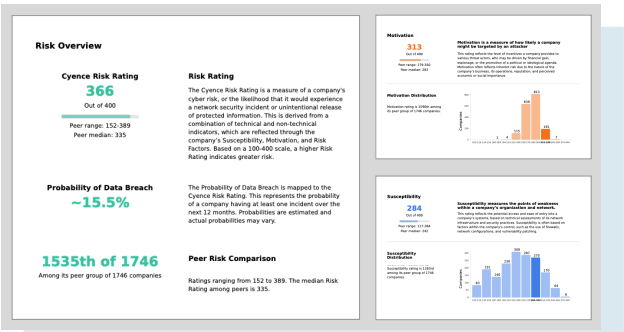
Develop Cyber Products with Confidence

Cyence for Cyber Risk Management is a cloud-native, economic cyber risk modeling product developed to help P&C insurers quantify cyber risk exposures. The product is built on a technological foundation of *data listening*, a process that collects, curates, and analyzes vast amounts of technical and behavioral data from a variety of sources at scale, including public data, open-source data, proprietary data, and third-party data. Enhanced by advanced data modeling, sophisticated machine learning, cybersecurity, and insurance domain expertise, the result is a comprehensive and predictive risk assessment product that adjusts as the cyber landscape shifts, continuously gathering data and updating economic models based on changing circumstances. Its risk models include a dynamic cost-benefit analysis to keep up with bad actors as they choose targets, and to keep up with companies as they shift their mitigation strategies. Leaders across the insurance industry use Cyence for Cyber Risk Management to prospect, underwrite, price profitable cyber risks, and manage portfolio exposure accumulations to develop new cyber products with confidence.



Trusted analytics, powered by data

> **"After conducting a review of data analytics services available in the market, we found that Cyence's data science capabilities and engineering expertise offered us the best solution to address the challenges of today's data-driven world."**
>
> **–Adam Rich, Head of Underwriting Technology, Beazley**



Predictive indicators of a company's cyber exposure

Write Profitable Cyber Risks

The cyber security technology industry is full of scores, ratings, and scorecards, but each tool measures technologies and technical metrics in a vacuum. To assess cyber threat, Cyence for Cyber Risk Management leverages a variety of econometric risk models and uses real breach data aggregated from multiple sources. The product goes far beyond just technology assessment by evaluating factors correlated with:

- Companies' cyber posture from the perspective of people and process
- Adverse motivation
- Attack capabilities
- The impact of a well-timed attack

As a result, the risk model produces the following types of output:

- **Risk rating:** A quantitative measure of a company's risk of having a data breach incident over the next 12 months. The prediction is a result of a comprehensive statistical predictive model that determines the relationship between a company's attributes and corresponding incidents.
- **Risk factors:** Curated insights on more than 45 risk factors derived from the data points collected via the data listening engine. These insights indicate a hacker's motivation to attack a company and the company's susceptibility to an attack, which is crucial to predicting enterprise cyber risks.
- **Modeled losses:** Estimates of losses against major individual cyber incidents (data breach and DDos attacks) as well as critical accumulations events (service provider outages such as cloud and CDN, software vulnerabilities, payment processor interruptions, and ransomware attacks).

With this information available to underwriters in a seamless fashion, they can identify the optimal price on an insurance tower and the corresponding price to write profitable cyber policies at both the individual risk level and the portfolio level.

> **"What Cyence brings is this ability of having a real-time analysis of the digital cyber profile of a customer and then using that to help our clients address some of those security risks, and then we can provide insurance and wrap insurance around that."**
>
> **–Vincent Branch, Chief Executive, AXA XL Accelerate Team**

Uncover opportunities for growth

Quantify cyber risk in losses and probabilities with Cyence for Cyber Risk Management. Prospect, assess, and price profitable insurance risks, and manage portfolio risk accumulations, with the most comprehensive cyber risk modeling product built for P&C insurance.

Guidewire is the platform P&C insurers trust to engage, innovate, and grow efficiently. We combine digital, core, analytics, and AI to deliver our platform as a cloud service. More than 380 insurers, from new ventures to the largest and most complex in the world, run on Guidewire. For more information, contact us at info@guidewire.com.

Manage Cyber Risks with a Single Solution

Cyence for Cyber Risk Management can be used to assess the risk level of a potential insured at an individual level, and is also vital for insurers that need a comprehensive view of their aggregate portfolio exposure. Having a single solution with advanced data management and end-to-end modeling capabilities helps insurers avoid the complexity of managing and maintaining multiple stand-alone solutions, eliminate data silos, and understand the shared attributes and correlation of risks.

For example, Cyence for Cyber Risk Management enables realistic, fact-based measures of probable maximum loss by examining the correlation of cyber risk in a portfolio with the potential losses to that portfolio from disaster scenarios. This detailed and continually updated understanding of risk accumulation is crucial for insurers managing the long-term stability and soundness of their portfolios.

Insurance Use Cases and Benefits

Use Case	Example(s)	Benefit(s)
Underwriting	• Augment underwriting with insights on technical, behavioral, and accumulation factors • Automate low-risk submissions through existing underwriting guidelines	• Improve risk selection • Streamline underwriting process • Improve underwriting efficiency • Support the explanations of underwriting decisions
Pricing	• Address pricing adequacy at the individual risk and portfolio level • Modify target pricing using predictive outputs • Reduce credit allowance for riskiest declines	• Protect profitability with granular, more accurate pricing • Optimize capital usage • Correct pricing discrepancies
Accumulation	• Evaluate portfolio health through portfolio loss analyses and accumulation risks • Customize scenarios to test hypotheses and manage accumulation risk	• Monitor portfolio health • Avoid/reduce portfolio losses
Product Development	• Design new insurance products and go-to-market strategies	• Develop new cyber products • Seize new growth opportunity