



## KDM ANALYTICS INNOVATION HIGHLIGHT



### COMPANY OVERVIEW

KDM Analytics is a software-based company that builds automated solutions for vulnerability analysis and risk management for cyber and cyberphysical systems. Offering the only automated cybersecurity risk management solution that deploys both top-down and bottom-up risk analysis, they focus on delivering their clients with a list of actions based on top quality evidence.

**LOCATION:** OTTAWA, ON

### TECHNOLOGY



**Security**

### KEEPING UP WITH DEMAND

The global risk analytics market is growing at a rapid pace. With the growth of digitalization, data/security breaches, AI adoption, and industry regulations, organizations are looking for increasingly robust ways to protect their information. This has led to a rising demand for global risk analytics. However, manually understanding, assessing, and managing risk for complex systems can be costly and laborious. Cyber and cyberphysical systems are already quite complex and when monitored manually, the risk of making mistakes only increases. Looking to provide an automated solution, KDM Analytics developed Blade RiskManager (BRM).

### BRM (BLADE RISKMANAGER)

Used by the US Air Force and Boeing, KDM Analytics' solution BRM helps quantify a system's exposure to cyber-attacks by prioritizing risk management activities through top-down and bottom-up analysis. BRM uses advanced AI techniques and leverages a cybersecurity knowledge base of over ten years. Through importing an enterprise system model (in the form of MS Word tables and an XML document), BRM provides various pieces of information such as vulnerabilities to fix, attacks to defend against, threats to eliminate, the system's riskiest components, and what security requirements are in need of implementation.

### MIGRATING AND PERFORMANCE TESTING THE BRM SOLUTION

Looking to migrate BRM into a cloud-based architecture and to performance test their platform, KDM leveraged CENG's testbed and expertise. During testing, BRM successfully analyzed systems up to 1000 nodes on a Kubernetes environment, validating that the solution is cloud agnostic. KDM also performed tests for 500 projects at 1000 nodes per project, allowing them to improve the average processing time per 1000 nodes from 3 minutes to 12 seconds while maintaining proper functionality.

**"Our project significantly improved the performance and stability of BRM Cloud, as a result of the testing process on CENG's testbed."**

**Jim deVette**

Project Manager, KDM Analytics

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