

Understanding the Kenna Security **Vulnerability Risk Score**



For users of **vmware**[®] Carbon Black

KENNA
Security

KENNA SECURITY INGESTS, AGGREGATES, AND PROCESSES BILLIONS OF PIECES OF DATA FROM INTERNAL AND EXTERNAL SOURCES, INCLUDING MORE THAN

15 threat & exploit intelligence feeds.

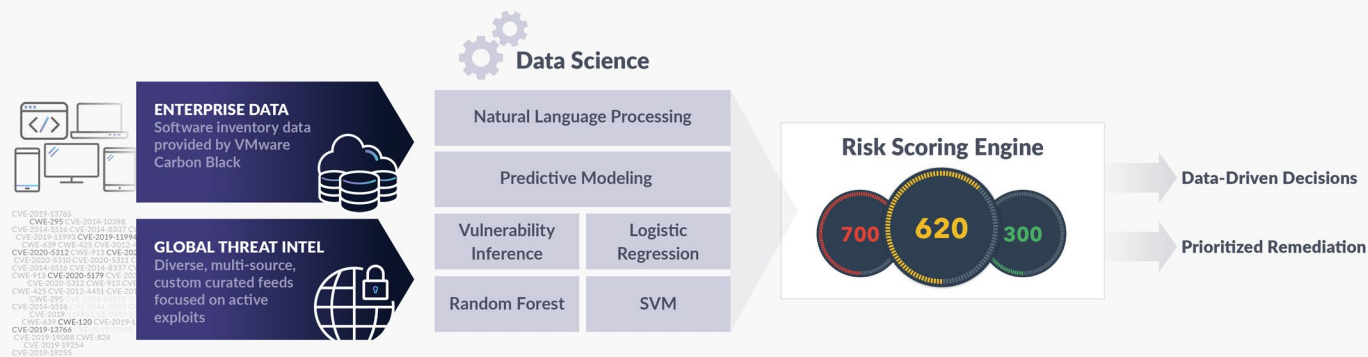
An increasingly popular feature of modern vulnerability risk management is a unique context-based risk score for every vulnerability. The purpose of this score is to provide security, IT, and infrastructure teams with an understanding of the relative urgency of the vulnerability so that they can prioritize the remediation efforts of some over others based on real-world exploitability.

Kenna Security Risk Score: Dynamic, Full Context

Unlike the Common Vulnerability Scoring System (CVSS) and other static scoring methods, Kenna Security provides the context required to understand the true level of risk that vulnerabilities pose to an organization. Kenna Security ingests, aggregates,

and processes billions of pieces of data from internal and external sources, including more than 15 threat and exploit intelligence feeds. Kenna Security then automates the analysis of this data using proven data science algorithms to deliver an accurate, quantifiable risk score for every vulnerability.

For VMware Carbon Black users, these scores are then immediately reflected within their console and are dynamically updated to correspond with changes in the threat landscape. The result is a real-time scoring method that considers a comprehensive set of internal and external data sources to provide full context into the specific amount of risk for every vulnerability, enabling security analysts to truly understand the level of risk and therefore effectively prioritize which vulnerabilities to remediate first.



The Kenna Security Vulnerability Risk Model

The selection of scoring variables is a key component of the modeling process. The Kenna risk score takes into account what is happening in real-time, in the wild, for each vulnerability. The score then provides an estimate of the likelihood of exploitation to deliver a rank ordering of the probability of exploitation using that particular attack vector.

Kenna uses the following datasets
TO ASSESS HOW PREDICTIVE
a variable is:



1. Collective learning
from **1 billion security events**
processed monthly



2. Studies
of more than **7 billion**
managed vulnerabilities



3. More than **15**
custom-curated **threat and**
exploit intelligence feeds

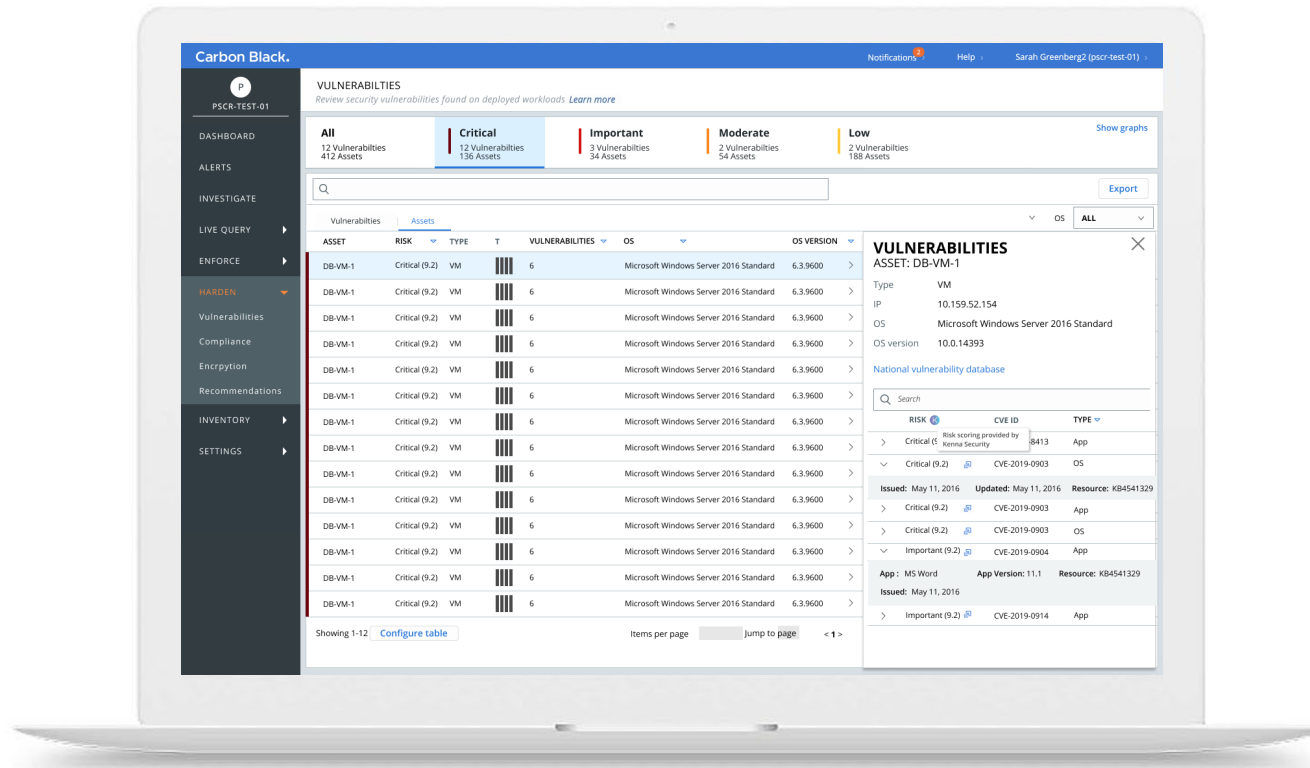
Every vulnerability within VMware Carbon Black Cloud Workload is assigned a risk score of between 0.0 (no risk) and 10.0 (maximum risk).

Kenna uses a combination of vulnerability and threat factors to determine a specific risk score for each vulnerability:

- Predictive (Boolean) classification by a machine learning classifier trained on historical exploit and exploitation data (confirmed 94 percent accuracy rate)
- Availability of an exploit module in a weaponized exploit kit such as Metasploit or Angler
- Pervasiveness of a vulnerability across disparate client environments
- Presence of a near-real-time exploitation in one or more of the above data sources
- Availability of a recorded exploit in exploit sources
- CVSS points above average
- and more.

Risk Scores in VMware Carbon Black Cloud Workload

VMware Carbon Black has integrated Kenna Security's vulnerability risk scores directly into VMware Carbon Black Cloud Workload. Every vulnerability within VMware Carbon Black Cloud Workload is assigned a risk score of between 0.0 (no risk) and 10.0 (maximum risk). For VMware Carbon Black Cloud Workload customers who are familiar with Kenna Security's risk scoring, which assigns a risk score between 0 and 100, this is effectively the same risk score you will find in Kenna Security's solutions; VMware simply divides Kenna's score by 10 (e.g., a Kenna risk score of 98 will appear in VMware Carbon Black Cloud Workload as a score of 9.8).



Maximizing the Efficiency and Effectiveness of Your Limited Resources

Kenna Security's vulnerability risk scores help security and infrastructure teams efficiently prioritize and proactively manage the vulnerabilities that pose the most risk to the organization. This, in turn, helps you maximize the effectiveness of your vulnerability management program while making the most efficient use of your limited resources. The integration of Kenna vulnerability risk scores into VMware Carbon Black Cloud Workload enables server administrators to determine the most critical vulnerabilities and take action, freeing up security resources to focus on more critical projects.

To learn more about aligning your organization around risk, visit
www.kennasecurity.com

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