

## NORTHSTAR NAVIGATOR

## SOLUTION BRIEF

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# A BETTER WAY TO MANAGE VULNERABILITIES

Regardless of size, organizations are struggling with the volume of vulnerabilities and the complexity of vulnerability risk management. By 2025, 70% of mid-size enterprises that take a traditional, volume approach to vulnerability management will have been breached through a known vulnerability, according to Gartner.

Organizations lack the time, money and resources to address every identified issue. Remediation efforts are held back by manual processes and a disconnected vulnerability remediation processes that compromises their ability to respond in a timely manner. In light of these constraints, how can an organization effectively decide which issues need to be addressed first?

That is where NorthStar comes in - NorthStar Navigator prioritizes exposure remediation by analyzing the severity of the vulnerabilities in the environment and the importance of the business functions they impact. This, in turn, provides a prioritized and actionable remediation plan that will have the greatest influence on protecting your business.

#### ANSWERING

#### **KEY BUSINESS QUESTIONS**



How do you ensure that the **most important issues** are remediated first?



How do you know which **vulnerabilities are associated with active threats?** 



How do you account for **compensating controls and exceptions?** 



How are you addressing the gaps and discrepancies that exist between vulnerability assessment and patch management?



How do you ensure your **limited resources are focused** on the right areas?



How do you understand and **effectively communicate risk** to various stakeholders across the organization?

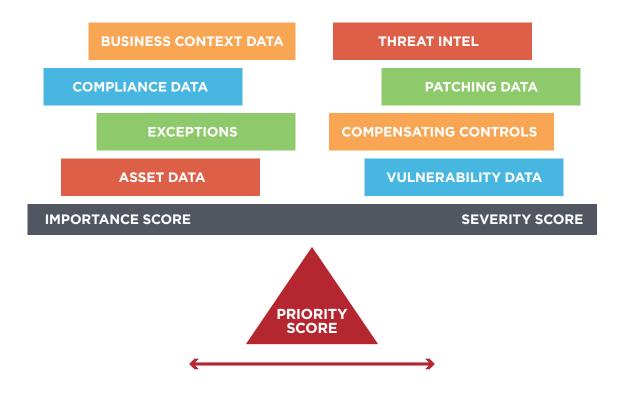


## IT'S NOT ROCKET SCIENCE

Accurate decisions require accurate data. NorthStar intelligently pulls data from your existing security and IT tools. Then, NorthStar cleans, correlates, and ranks the accuracy of each source based on confidence and aging. That information is then pulled into SuperLists, providing an accurate and comprehensive view of every asset, every business application, and every vulnerability.

With the complete inventories delivered through NorthStar's SuperLists, the vulnerability management "problem" can be solved! Since NorthStar consolidates all IT-related data under one roof, the days of console-hopping and Excel-aggregation are over. Vulnerabilities correlated with threat intelligence, missing patches, device misconfiguration data, and security tool data layered with separate technical severity and business importance scores can now be viewed in a single platform.

As your environment changes and evolves, NorthStar tracks those changes to maintain a constant and consistent source of information. Your business logic and classifications are imported into NorthStar as easily customizable rule sets that are automatically applied every time data is collected and processed. This consistency is maintained at all levels of data – from individual assets and vulnerabilities to business applications to organization-wide historical tracking.





#### **BUSINESS CHALLENGES**

**Traditional vulnerability management tools** have long relied on industry recognized severity ratings to help classify and prioritize vulnerabilities. By focusing on technical severity, organizations were prioritizing their remediation efforts by eliminating the most severe issues first. While this provided a rudimentary framework for vulnerability remediation, numerous issues emerged as asset counts and data volumes dramatically increased. NorthStar Navigator was designed to improve current vulnerability management and remediation processes in two key areas:



The focus on CVE identified vulnerabilities is too narrow to adequately express and in turn, respond to the current threat landscape. Vulnerability teams and products should broaden their focus to address all exposures: vulnerabilities, missing patches, and misconfigurations on assets and business services.



**Understanding the business value and potential consequence** associated with an asset or business service cannot be adequately measured on the same scale as vulnerabilities. Measured on its own and independently calculated, business importance can more accurately express both the value and risk associated with an organization's assets and services.

## ADDRESSING EXPOSURES - BROADENING THE FOCUS BEYOND VULNERABILITIES

As vulnerability management has matured as a process, a standardized taxonomy and language has evolved to satisfy the need for security professionals to formalize the way they describe and talk about vulnerabilities. Growing out of this effort, CVE IDs and CVSS scores soon became the standard for classifying, managing, and remediating vulnerabilities. As a result, security tools have heavily focused on technical severity ratings and external threat intelligence to enrich vulnerability data enabling organizations to begin basic prioritization of remediation efforts. This focus on technical severity has dominated the vulnerability management market and thought leadership for many years.

NorthStar is the next evolution of vulnerability management. It widens visibility beyond traditional vulnerabilities to include additional critical aspects of risk management and remediation. NorthStar enables vulnerabilities to be categorized as a subset of the larger family of exposures. Common exposure categories may include traditional vulnerabilities, missing OS and application patches, missing or misconfigured common tooling, and misconfigurations of system and security settings. Each of these categories represent a uniquely important and measurable impact on the attack surface and subsequent risk related to an asset. This risk cannot be adequately expressed in the current lexicon of vulnerability management.



## UNDERSTANDING BUSINESS IMPORTANCE OF DEVICES AS AN INDEPENDENT COMPONENT OF RISK

The second challenge with the current state of vulnerability management is the encapsulation of business importance into the technical severity model. NorthStar was built on the premise that the technical severity of exposures present on any given asset and the business importance of that asset are fundamentally different in a few distinct ways.

#### **VULNERABILITIES**

#### **BUSINESS IMPORTANCE**

#### Vulnerabilities have inherent qualities

that are present irrespective to the specific asset or organization in which that asset is operating. The language and scales used to measure technical severity were developed precisely for common understanding and classification.



The business importance of an asset is unique with respect to its purpose and context to the organization. The idea of importance classification is, at its core, subjective and based on the needs and goals of the organization.

IT Operations and Security teams can have an identifiable and measurable impact on the aggregate technical severity ratings of assets. Through remediation efforts and the deployment of compensating controls, these teams impact the aggregate technical severity ratings

by simply eliminating or reducing risks

associated with known exposures.



Business importance typically cannot be adjusted or remedied by IT
Operations or Security. Both the business function of assets and services and their associated risks are typically driven or controlled by application and business leadership and are independent of technical controls and/or adjustments.

Because of these distinctions, NorthStar was designed to address business importance as a separate calculated score to better reflect the risk landscape and the dynamic relationship that exists between technical severity and business importance. By leveraging these interrelated concepts and scoring, NorthStar can provide the necessary context for asset and service level risk identification and, more importantly, the prioritization of remediation on the most critical assets and business services.



## **OUR DIFFERENTIATORS**

GOING BEYOND CVSS

## NORTHSTAR HAS LONG RECOGNIZED THE DEFICIENCIES OF CVSS



Asset criticality was overly simplistic



Only accounts for vendor identified vulnerabilities



Inadequate at capturing emerging threats and temporal characteristics

- Ex. This CVE has actively been exploited within the last 30 days.

NorthStar recognized that these aspects of vulnerability management were holding organizations back from truly impactful and proactive vulnerability remediation and management.

To address these issues, NorthStar tackled the prioritization process along several fronts:



**Integrated Threat Intelligence** - NorthStar has partnered with the leading threat intelligence provider to automatically enrich the vulnerability and asset data NorthStar already ingests.



A new prioritization model that enables customers to manage their vulnerability prioritization process through an easy to understand and highly configurable rule engine. These rules allow customers an even greater level of control over the prioritization process as asset, vulnerability, patching, threat intelligence, compensating controls and exception data is merged to form a cohesive, coherent, and transparent prioritization process.



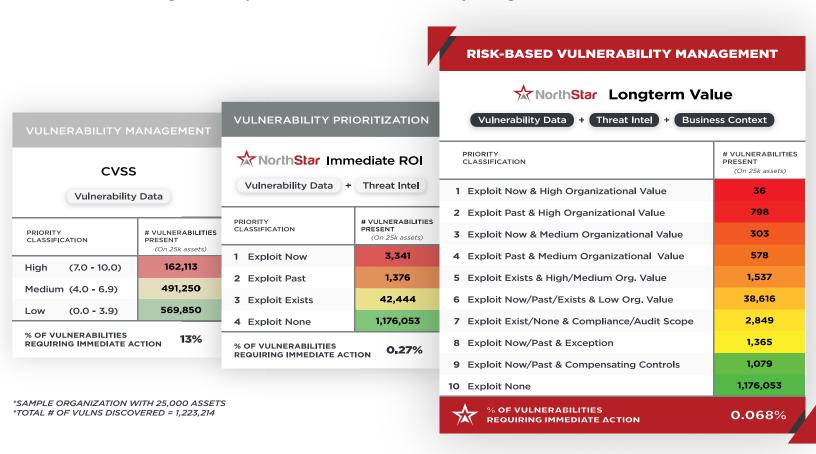
**Support for Compensating Controls and Exceptions** – NorthStar's prioritization model now incorporates data about compensating controls and exceptions to further allow for customers to refine their prioritization process. This additional support allows for customers to drive the severity and importance of a vulnerability, an asset, or a specific instance of a vulnerability on an asset according to set of predefined rules that are automatically applied.



#### THE PATH TO TRUE RISK-BASED VULNERABILITY MANAGEMENT

As RBVM programs have begun to mature, there has been shift from older CVSS only based programs towards vulnerability prioritization by the incorporation of external threat intelligence. However, many organizations that have adopted this style of vulnerability management program have come to the same conclusion: Simply adding in threat intel does not equate to true prioritization. The key to unlocking the power of threat intel lay within the context of business importance. With business importance, organizations are able to better reduce the number of lower priority vulnerabilities and distill out an actionable and effective remediation plan.

The following is an example of this evolution in vulnerability management:



From a starting sample size of 1.23 million unique instances of vulnerabilities in this sample organization, NorthStar was able to determine only 0.068% (834) of the vulnerabilities discovered in the environment were of a critical priority and required immediate action. This significant reduction highlights the impressive flexibility of the NorthStar model and empowers vulnerability management efforts by breaking down the large list of vulnerabilities into a manageable, laser-focused list that shows how to drive action to best protect the organization.

NORTHSTAR NAVIGATOR WAS CREATED TO MAXIMIZE THE EFFECTIVENESS OF REMEDIATION EFFORTS BY FOCUSING ORGANIZATIONS ON THE PROBLEMS THAT REALLY MATTER AND PROVIDING CLEAR, ACTIONABLE PATHS TO REMEDIATION AND LOWER OVERALL RISK.



The result of this new model is maximized effectiveness of remediation efforts by focusing organizations on the problems that really matter and providing clear, actionable paths toward remediation and lower overall risk.



## NORTHSTAR DELIVERS EMPOWERING REMEDIATION THROUGH CONTEXT

With NorthStar, remediation efforts can be driven in ways that best reflect the available resources and risk appetite of the organization. NorthStar uses the Severity Scores and Importance Scores to calculate a weighted average called a Priority score. Priority scores allow an organization to create views of the most vulnerable AND the most important assets. Therefore limited resources can be prioritized effectively during remediation efforts. When deciding on the final Priority calculations and weightings, NorthStar empowers organizations to decide what business and technical factors are most important to them.



## NORTHSTAR DELIVERS A SINGLE SOURCE OF TRUTH

NorthStar's automated and agentless data aggregation enables correlation, normalization, and consolidation of data without any additional scanning. This collected data is cleansed, enriched, and consolidated in our Transformation Engine and can be leveraged by many different aspects of the organization because of its superior accuracy, context, and comprehensiveness.



## NORTHSTAR DELIVERS SIMPLIFIED AND FASTER DATA INTEGRATIONS

Simplifying the process of integrating data sources was a key design focus of NorthStar. Engineered completely vendor agnostic, NorthStar simplifies the integration process by pushing the configuration entirely to the front-end web UI. Whether the data exists in a simple spreadsheet, database, or through an API, NorthStar facilitates data connector configuration without the need for a developer's skill set or lengthy enhancement requests through a vendor.



## NORTHSTAR DELIVERS COMPLETELY CUSTOMIZABLE SCORING

Designed to adapt to every customer's risk landscape, NorthStar's Priority Score is completely customizable and flexible enough to ensure that only the most important factors for each customer affect the overall scoring. NorthStar's data model allows for the addition of organization-specific exposures and the adjustment of attributes that contribute individually to the Severity and Importance Scores as well as the resultant Priority Scores for assets and services. The freedom and transparency of NorthStar's flexible scoring model allows organizations to adjust the overall scoring to better reflect their business needs and risk appetite.



### **TOP USE CASES**



#### YOU NEED ALL YOUR INFORMATION IN ONE PLACE

**Consolidate information.** NorthStar provides a single source of truth for all assets, exposures, and vulnerabilities and ensures that it is current, accurate, and complete.



#### YOU WANT TO MAKE THE BEST USE OF LIMITED RESOURCES

**Focus limited resources.** NorthStar ensures you are prioritizing and addressing the biggest issues that could impact your most important business functions.



#### YOU'RE TIRED OF LINGERING EXPOSURES

**Fight lingering exposures.** NorthStar maintains historical data to ensure vulnerabilities don't disappear off the radar with the passage of time. It also integrates exception data and allows you to understand accepted and mitigated risk.



## YOU'RE FRUSTRATED WITH THE VISIBILITY GAP BETWEEN VULNERABILITIES AND PATCHING

**Bridge the visibility gap.** NorthStar reconciles and maintains all data from vulnerability scans and patch management solutions and enriches them with data from external sources. It also feeds reconciled data to downstream solutions via push or pull.



#### YOU WANT TO TRACK REDUCTION IN EXPOSURE RISK

**Visualize risk reduction.** NorthStar automatically keeps track of what has changed and can show how things have gotten better, or worse, over time.



#### YOU'RE TIRED OF RELYING ON MANUAL PROCESSES AND STALE DATA

**Scrap manual processes.** NorthStar automates the manual efforts to compile information for assets and exposures and ensures accuracy by scoring and analyzing the quality of all the gathered information.



#### **KEY BENEFITS**

#### Prioritize vulnerability and exposure remediation based off of risk to YOUR business

- ✓ Gain key insight into the business importance of individual assets and business services
- Leverage the flexibility to decide what business and technical factors are most important to your organization
- Provide visibility into exposures beyond vulnerabilities, such as coverage gaps and misconfigurations across security tooling and compensating controls

## Address the visibility gap that inherently exists between IT Security and IT Operations

- ✓ **Provide automated correlation** of vulnerability and patch information
- Accelerate remediation efforts by integrating with IT Management and Service Desk systems
- Provide valuable insights to IT incident response teams before, during, and after IT-related security events

#### Provide simple, powerful, and dynamic reporting

- √ Validate that the most important issues have been remediated
- ✓ **Slice and dice dashboards and reports** that fit the needs of your organization by line of business, location, business services, etc.
- Delivers out of the box dashboards, and easily customizable dashboards configured through the front-end UI
- ✓ Enforce robust role-based access control and dataset security

### Provide a complete and accurate inventory of all devices and all exposures

- Gain visibility into the variety, severity, and age of exposures existing in their environments
- Enrich existing asset inventory and management systems with relevant business and data classifications
- Assist in data hygiene efforts to accurately map the complex relationships between assets and business services



#### **CONTACT US**

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