PURESTORAGE®
Uncomplicate Data Storage, Forever

SOLUTION BRIEF

# Gain Infrastructure Visibility with Pure Storage and Microsoft Sentinel

Unparalleled data storage protection through seamless integration

Data storage systems housing sensitive information face constant threats due to the valuable data they contain. Earlier this year, the SANS Institute reported an approximate 73% increase in ransomware cases from 2022 to 2023. Delay in detection provides attackers with a substantial window to exfiltrate data or deploy ransomware, jeopardizing business continuity and resulting in significant financial losses. Rapid attack detection remains essential; however, ensuring swift and automated response mechanisms is equally crucial. Attackers specifically target these vulnerable periods to maximize disruption before effective responses can be implemented.

## Solution Overview

Pure Storage® has partnered with Microsoft Sentinel and their cloud-native SIEM Solution to provide advanced visibility into storage infrastructure. This partnership utilizes cloud-native SIEM (security information and event management) and SOAR (security orchestration, automation, and response) services. This collaboration empowers the collection and correlation of security data from storage components, delivering a unified solution for threat detection and rapid response. This integrated approach ensures an enhanced security posture and streamlined management, bolstering your defenses against evolving cyber threats across your infrastructure.

## FlashArray Log Collection

For Pure Storage FlashArray™, syslog alerts produced by the appliance are analyzed to identify potential attack indicators. Changes in software configuration, network settings, and decreases in data compression or deduplication rates may indicate benign activities or more malicious actions.

Several preparatory steps are necessary before initiating log ingestion into the Microsoft Sentinel workspace. These include configuring the syslog server, adding server details to the FlashArray system, and installing the Azure Monitor Agent on the syslog server. This process entails onboarding the machine to Azure as an Arc-managed device, creating data collection rules (DCRs), and installing the Azure Monitoring Agent (AMA).

### Empowered Security

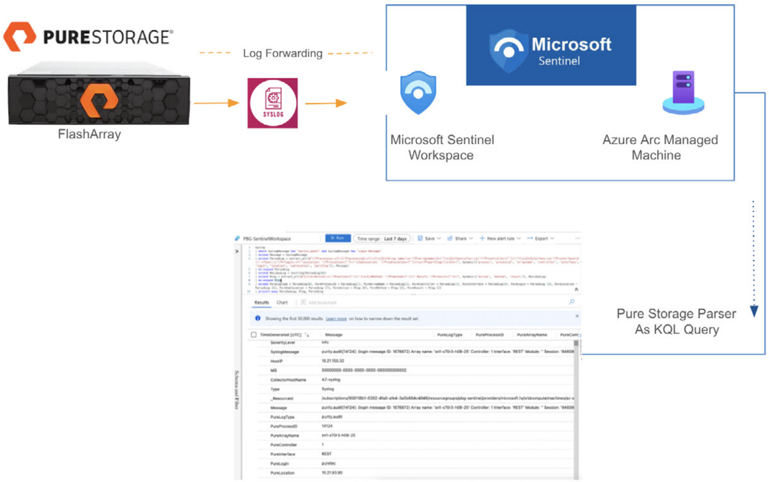
Gain advanced visibility into storage infrastructure. This partnership utilizes cloud-native SIEM.

### Proactive Mitigation

Seamless integration of Microsoft Sentinel's SmartResponse and Pure Storage FlashArray.

### Peace of Mind

Automated workflows activate in response to alerts or incidents.



Showing the first 30,000 results. Learn more on how to narrow down the result set.

```
TimeGenerated [UTC]   Message   PureLogType   PureProcessID   PureArrayName   PureCont
    SeverityLevel       info
    SyslogMessage       purity.audit[14124]: (login message ID: 1678872) Array name: 'sn1-x70r3-h08-25' Controller: 1 Interface: 'REST' Module: '' Session: '94609
    HostIP              10.21.155.32
    MG                  00000000-0000-0000-0000-000000000002
    CollectorHostName   AZ-syslog
    Type                Syslog
    _ResourceId         /subscriptions/958118b1-6302-4fa0-afe4-3a5b664c4846/resourcegroups/pbg-sentinel/providers/microsoft.hybridcompute/machines/az-s
    Message             purity.audit[14124]: (login message ID: 1678872) Array name: 'sn1-x70r3-h08-25' Controller: 1 Interface: 'REST' Module: '' Session: '94609
    PureLogType         purity.audit
    PureProcessID       14124
    PureArrayName       sn1-x70r3-h08-25
    PureController      1
    PureInterface       REST
    PureLogin           puretec
    PureLocation        10.21.93.90
```

**FIGURE 1** FlashArray log ingestion into the Microsoft Sentinel workspace

## How Automated Threat Response Works

To optimize the effectiveness of security response processes, organizations can utilize the SmartResponse automated capabilities offered by Microsoft Sentinel, an integrated SOAR platform. This advanced functionality is seamlessly integrated into Microsoft Sentinel's SmartResponse for Pure Storage FlashArray solution, providing users with a powerful toolset for proactive threat mitigation.

The Azure Logic Apps threat response for FlashArray includes a set of automated workflows that trigger in response to alerts or incidents. For example, when suspicious activity is detected on any FlashArray endpoint, as indicated by parsing logs within the Microsoft Sentinel workspace, an alert is generated. Following this alert, a snapshot of the relevant protection groups or volumes on the FlashArray can be captured.

By initiating a SafeMode™ Protected Snapshot, an immutable and indelible copy of your critical data is created. Ransomware cannot eradicate, modify,

or encrypt the snapshot, safeguarding your data from additional loss, infection, encryption, or other attacks.

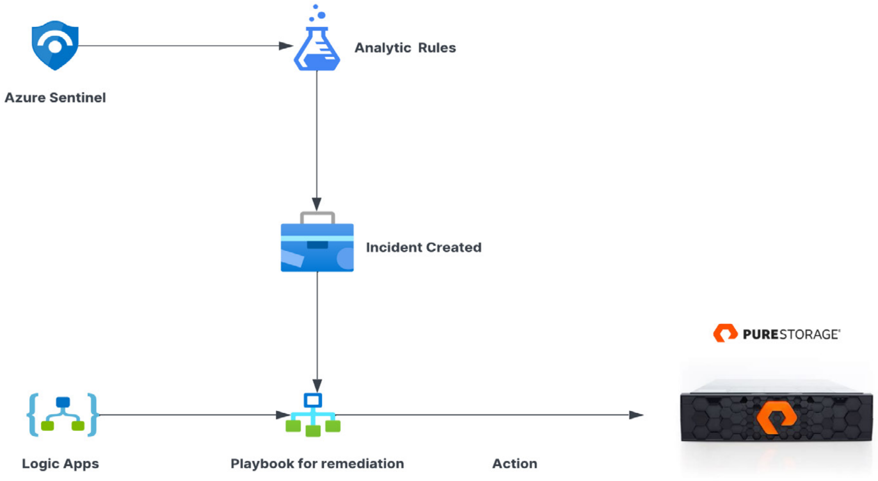


**FIGURE 2** Microsoft Sentinel threat response

## Use Case Scenarios

The following table lists common use case scenarios.

| Action | Description | Use Case |
|---|---|---|
| Take Protection Group Volume Snapshot | Creates a snapshot of all volumes within a protection group | An attack is detected and a SafeMode Protected  snapshot is taken to secure critical data. |
| Take Volume Snapshot | Creates a snapshot of the  volume. | An attack is detected and a SafeMode Protected snapshot is taken to secure critical data.<br>Note: volume level snapshots are only protected by SafeMode if SafeMode is enabled array-wide. |
| Remove User Access | Removes the user account in order to prevent data exfiltration, deletion or encryption. | A user account has been compromised and is trying to either dump or delete critical data. |

**TABLE 1** Use case scenarios

## About the Microsoft Sentinel Cloud-native SIEM Solution

Microsoft Sentinel is a cloud-native SIEM platform designed to swiftly identify both existing and potential threats. Leveraging its advanced analytics capabilities, Sentinel delivers intelligent security analytics and threat intelligence across the enterprise. Offering a comprehensive solution, it enables attack detection, threat visibility, proactive hunting, and effective threat response, all within a single platform.

## About Pure Storage

Pure Storage offers a cloud experience that empowers every organization to maximize their data's potential while minimizing the complexity and cost of managing the underlying infrastructure. Our commitment to providing true storage as-a-service enables customers to adapt to evolving data needs rapidly and efficiently, whether deploying traditional workloads, modern applications, containers, or more.

We believe we can significantly reduce data center emissions worldwide through our environmental sustainability initiatives, which include designing products and solutions that help customers decrease their carbon and energy footprint. With a certified customer satisfaction score in the top one percent of B2B companies, our continuously growing list of customers ranks among the most satisfied in the world.

## Additional Resources

- Cloud-native SIEM solution with Microsoft Sentinel
- Pure Storage and Microsoft Sentinel Solution on the Azure marketplace.
- Discover Pure Storage data protection solutions
- Learn how SafeMode secures data from ransomware attacks