

Shadow AI **Exposed:** Zero Trust & Shadow AI Threats

Combating Shadow AI with Microsoft Security
Solutions and Zero Trust Methodologies

MARCH 5TH, 2025

TOPICS TO BE **COVERED**

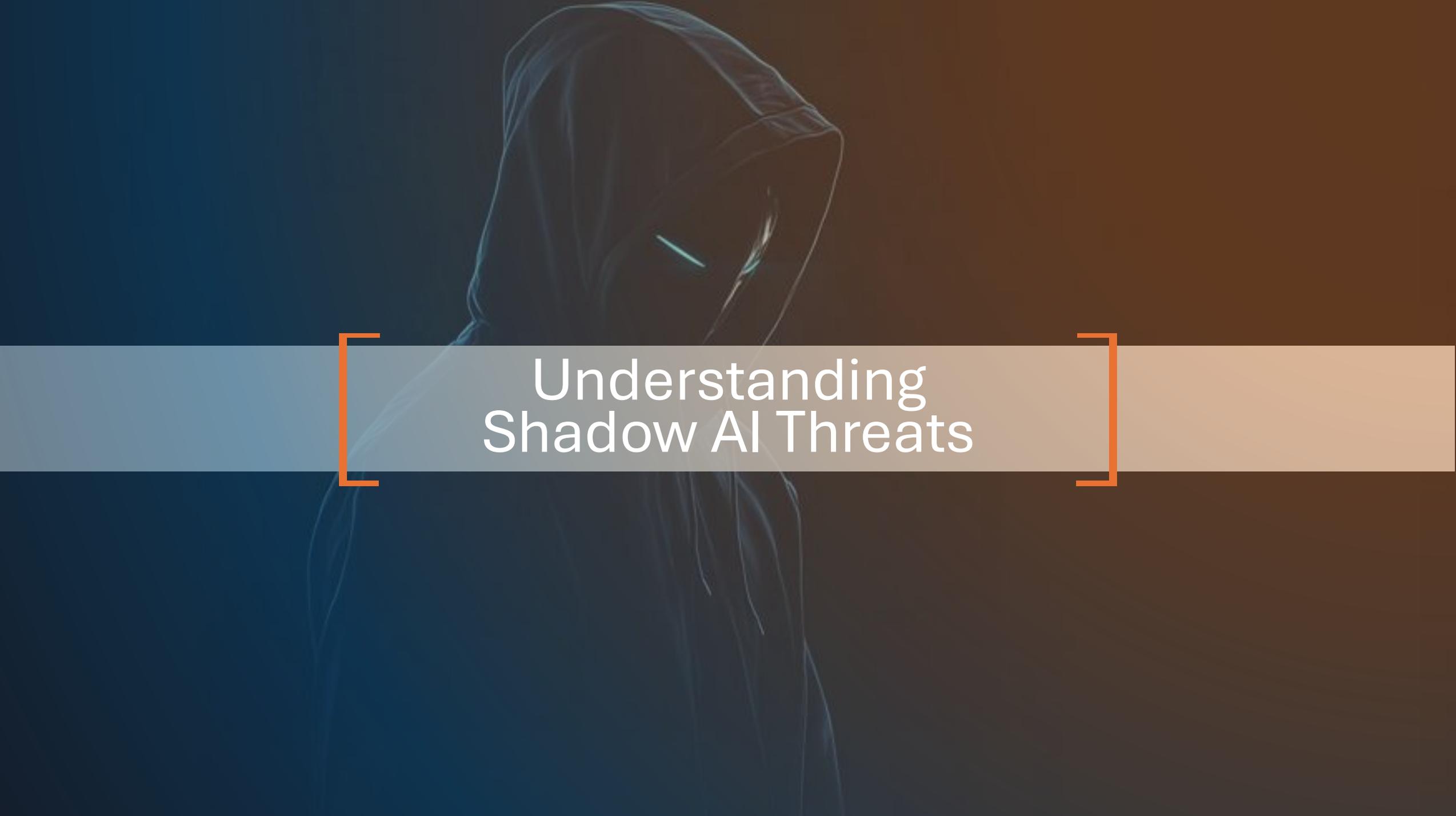
Understanding Shadow AI Threats

Introduction to Zero Trust Methodologies

Leveraging Microsoft Purview for Threat Detection

Utilizing Intune for Endpoint Protection

Integrating Microsoft Purview & Intune for
Comprehensive Security



Understanding Shadow AI Threats



Definition and Examples of Shadow AI

Understanding Shadow AI

- ▶ Shadow AI refers to AI tools used without organizational approval, posing risks to data security and compliance.

Unauthorized Machine Learning Platforms

- ▶ Unregulated machine learning platforms are often used by employees without oversight, leading to potential security vulnerabilities.

Risks of Unauthorized Chatbots

- ▶ Unauthorized chatbots may handle sensitive data without proper security measures, increasing the risk of data breaches.

Risks Associated with Shadow AI



Data Breaches

Shadow AI can lead to significant data breaches, exposing sensitive information and compromising organizational security.



Compliance Violations

Organizations using shadow AI risk violating compliance regulations, which can result in hefty fines and legal challenges.



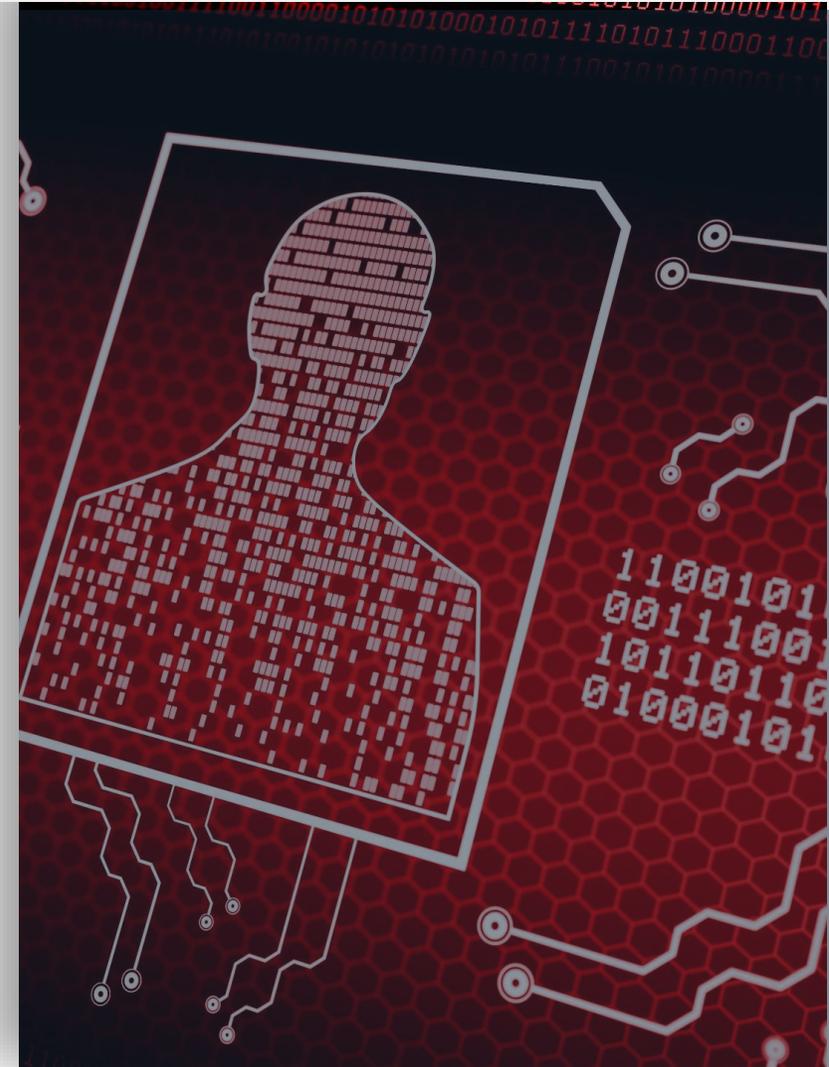
Malicious AI Usage

The potential for malicious AI usage can pose threats to organizations, leading to misuse of AI technologies for harmful purposes.



Reputational Damage

Reputational damage can occur if organizations fail to manage shadow AI risks, impacting public trust and stakeholder confidence.



Impact on Organizational Security

Vulnerabilities of Shadow AI

Shadow AI introduces hidden vulnerabilities within an organization, making it hard to monitor and manage properly.

Unauthorized Access Risks

The presence of Shadow AI can lead to unauthorized access to sensitive information, posing significant security risks.

Exploitation of Sensitive Data

Sensitive data may be exploited due to the lack of oversight in Shadow AI operations, leading to data breaches.

A Perfect Storm



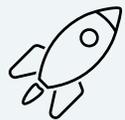
Significant Investment Drives Quick Feature Development

Companies, both large and small, are racing to release and enhance their products with AI functionalities.



Regulatory Agencies are Starting to Respond

Government bodies are beginning to update compliance and legal frameworks to address the rapid increase in AI usage.



Rapid Growth of New AI Applications

Every day, new AI-driven applications are launched in the market, each carrying its own set of risks.



Users and Threat Actors are Eager and Ambitious

Individuals at various levels are investigating new AI-enabled opportunities, creating a conducive environment for Threat Actors to breach systems.



INTRODUCTION TO
Zero Trust Methodologies

Principles of Zero Trust Security



Never Trust, Always Verify

The Zero Trust model emphasizes verifying all users and devices before granting access to resources, reducing potential threats.

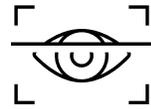
Least Privilege Access

Implementing least privilege access ensures users have only the permissions necessary for their roles, minimizing risk exposure.

Continuous Monitoring

Continuous monitoring is crucial in the Zero Trust model to detect and respond to threats in real-time.

Key Components of Zero Trust Architecture



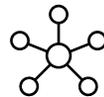
Identity Verification

Identity verification ensures that only authorized users can access sensitive information and systems, enhancing overall security.



Device Health Checks

Regular device health checks ensure that only compliant and secure devices can connect to the network, minimizing vulnerabilities.



Network Segmentation

Network segmentation divides the network into smaller segments to limit the spread of potential breaches and enhance security.



Data Encryption

Data encryption protects sensitive information during transmission and storage, ensuring privacy and integrity against unauthorized access.



Data Classification

Data classification enables intelligent decision making based on its classification level.

Benefits of Implementing Zero Trust



Enhanced Security

Zero Trust enhances security by minimizing attack surfaces and protecting sensitive data from potential breaches.



Regulatory Compliance

Implementing Zero Trust helps organizations meet compliance requirements, safeguarding sensitive data and enhancing overall trust with stakeholders.



Improved Data Protection

With Zero Trust, organizations can implement stricter access controls, ensuring that only authorized users have access to sensitive information.



Culture of Security

Individuals at various levels are investigating new AI-enabled opportunities, creating a conducive environment for Threat Actors to breach systems.

Calculate Risk

$$\text{ALE} = \text{ARO} * \text{SLE}$$

$$\text{SLE} = \text{AV} * \text{EF}$$

ALE: Annualized Loss Expectancy
ARO: Annualized Rate of Occurrence
SLE: Single Loss Expectancy
AV: Asset Value
EF: Exposure Factor

Leveraging M365 Purview

FOR THREAT DETECTION

Overview of M365 Purview Capabilities

Data Classification

M365 Purview offers robust data classification tools that help organizations categorize and manage sensitive information efficiently.

Labeling Mechanism

The labeling feature allows users to apply security and compliance labels to data, enhancing data protection and ensuring regulatory compliance.

Activity Monitoring

M365 Purview enables organizations to monitor data activity and access, ensuring that data governance policies are followed effectively.



Monitoring and Analyzing Data Activities

Real-Time Monitoring

M365 Purview enables organizations to monitor data activities in real-time, enhancing their security posture.

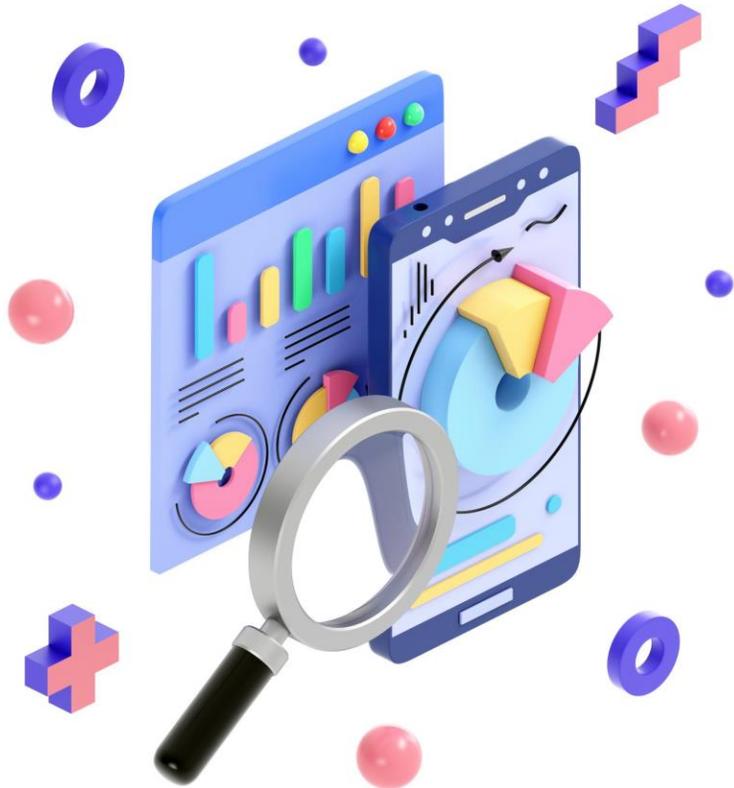
Identifying Anomalous Behavior

The system identifies anomalous behavior that may indicate potential shadow AI threats, allowing for quick responses.

Timely Interventions

By recognizing threats early, organizations can implement timely interventions to mitigate risks effectively.

Identifying and Mitigating Shadow AI Threats



Advanced Analytics Tools

Microsoft Purview utilizes advanced analytics tools to detect and identify potential shadow AI threats within organizations.

Risk Mitigation Strategies

Organizations can implement effective risk mitigation strategies with Microsoft Purview to manage shadow AI threats proactively.

Security Measures Implementation

Microsoft Purview facilitates the implementation of appropriate security measures to protect against shadow AI risks and vulnerabilities.

Data Classification

Microsoft Purview facilitates the data classification and discovery process, enabling improved decision making over time.

Reduce Risk with Microsoft Intune

Intune, a powerful ally

Introduction to Intune Features



Mobile Device Management

Intune enables organizations to manage mobile devices securely, ensuring compliance with corporate policies.



Application Management

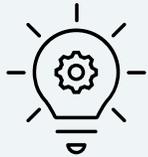
With Intune, IT administrators can manage applications on devices, controlling access and deployment effectively.



Policy Enforcement

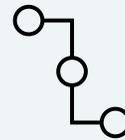
Intune's policy enforcement features help maintain security across all endpoints, ensuring devices meet compliance standards.

Deploying Zero Trust Policies via Intune



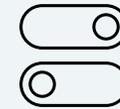
Zero Trust Security Framework

Zero Trust is a security model that requires strict identity verification for every person and device trying to access resources.



Endpoint Management with Intune

Intune allows organizations to manage devices and apps, ensuring compliance with security policies across all endpoints.



Access Control Policies

Implementing access control policies ensures that only authorized users and devices can access sensitive data and applications.



Ensuring Compliance and Enforcement

Compliance with Security Policies

Intune aids organizations in adhering to security policies, ensuring that all devices meet required standards.

Automated Compliance Checks

Automated checks provided by Intune help streamline the compliance process, reducing manual effort and errors.

Minimizing Security Breaches

By enforcing compliance, Intune minimizes the risk of security breaches, protecting organizational data and resources.

Integrating M365 Purview and Intune

FOR COMPREHENSIVE SECURITY

Combining Data Governance and Endpoint Management

Synergistic Security Approach

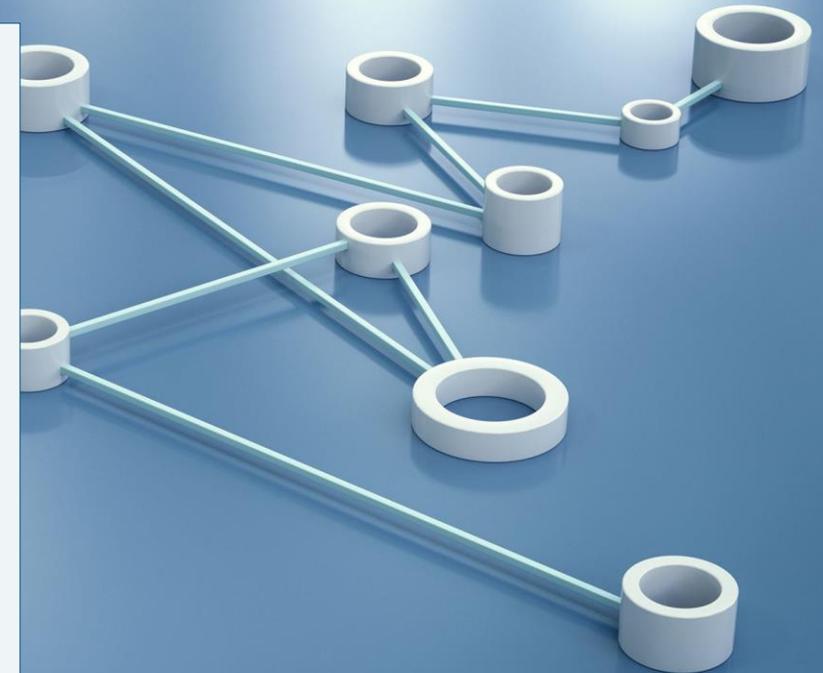
Integrating Microsoft Purview and Intune creates a unified security strategy for organizations.

Effective Data Management

Organizations can manage data efficiently while ensuring compliance and security across their endpoints.

Endpoint Security

Securing endpoints is crucial for protecting sensitive data and maintaining organizational integrity.

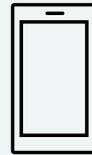


Case Studies of Integrated Security Approaches



Integration of Microsoft Purview

M365 Purview provides powerful tools for data protection and compliance, enhancing security within organizations.



Role of Intune

Intune plays a critical role in managing mobile devices securely, ensuring that organizational data remains protected.



Mitigating Shadow AI Threats

Integrating these solutions helps organizations effectively mitigate potential threats posed by shadow AI technologies.

Best Practices for Seamless Integration



Regular Audits

Conducting regular audits ensures compliance and identifies areas for improvement in the integration process.



Alignment of Security Policies

Aligning security policies across platforms ensures a cohesive security posture and minimizes risks during integration.



Continuous Training

Providing continuous training for staff helps maintain up-to-date knowledge on Microsoft Purview and Intune functionalities and best practices.



Alignment of Compliance Policies

Aligning compliance policies empowers security teams to be proactive in defense of critical assets within the datasphere.

What's Next?

Apply for a **Low-Cost Data Security Assessment**

As a valued attendee of our Microsoft Purview webinar, you have the exclusive opportunity to apply for a comprehensive data security assessment. This assessment will help you:

- ▶ **Identify Vulnerabilities:** Uncover potential weaknesses in your data security infrastructure.
- ▶ **Enhance Protection:** Receive tailored recommendations to strengthen your data protection measures.
- ▶ **Ensure Compliance:** Align your data security practices with industry standards and regulations.
- ▶ **Optimize Resources:** Make informed decisions to efficiently allocate your security resources.



CONCLUSION

Zero Trust Methodologies

Implementing Zero Trust methodologies is crucial for security, ensuring that all access requests are verified.

Microsoft Purview Integration

Leveraging M365 Purview helps organizations manage data security and compliance, enhancing overall protection.

Intune for Device Management

Intune plays a vital role in managing devices securely and ensuring organizational data remains protected.