

Detecting and Responding to Identity Risks with Microsoft Entra ID Protection

Combining AI-driven risk signals with Conditional Access for secure authentication

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#PerparimLabs #MicrosoftEntra #IdentityProtection
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What Is Entra ID Protection?



Formerly Azure AD Identity Protection



Detects, investigates, and remediates identity-based risks



Uses AI signals like location, device, and behavior



Integrates with Conditional Access and Sentinel for automated defense

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How Risk Detection Works



Risky sign-ins: Detected during authentication (e.g., atypical travel, anonymous IPs)



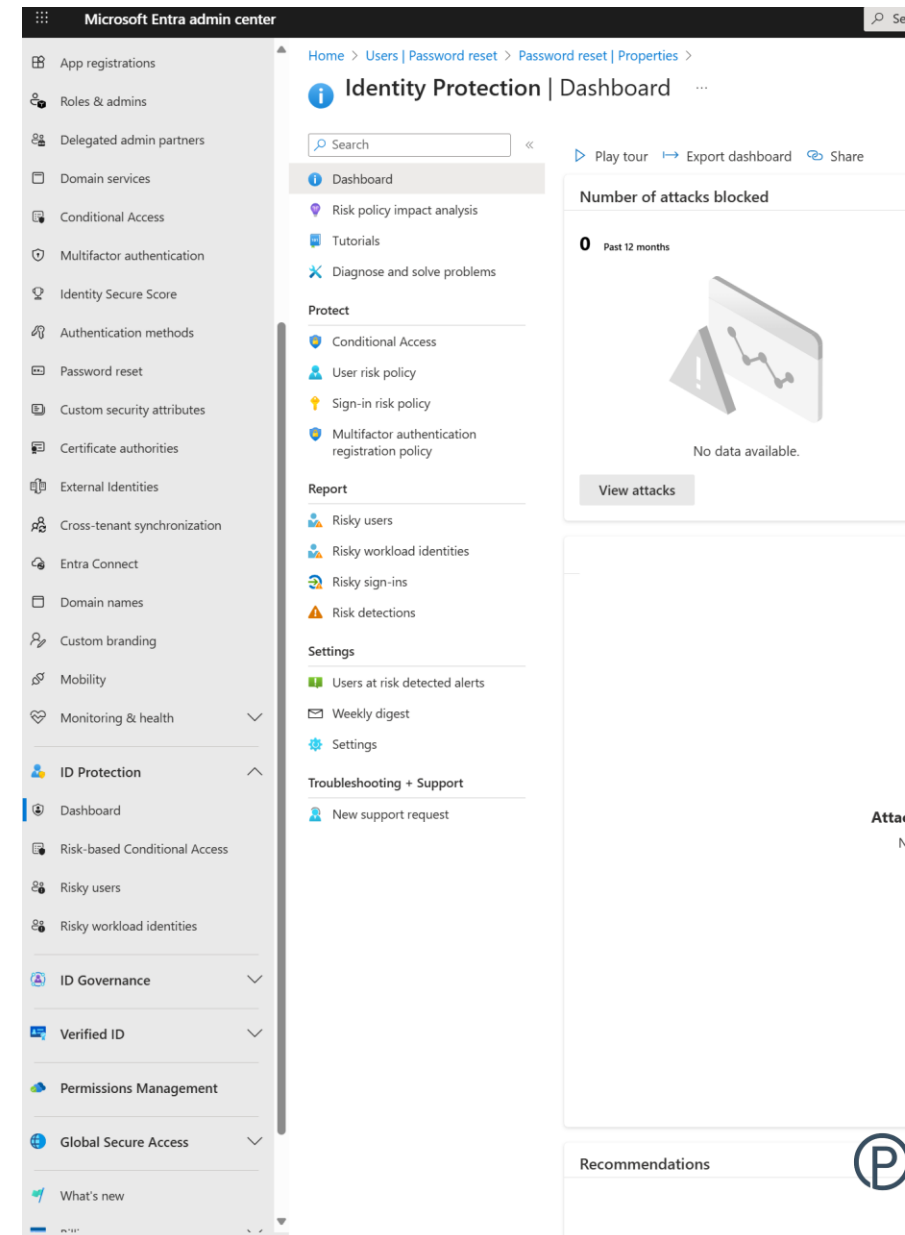
Risky users: Based on behavior anomalies or dark web credential leaks



Microsoft AI analyzes **trillions of signals** to assign risk levels (Low / Medium / High).

Dashboard Overview

- Centralized view of risky users, sign-ins, and policy enforcement.



Sign-in Risk Policy

- Applied to all users
- Risk threshold: *Medium and above*
- Action: *Require MFA*
- Reinforces Zero Trust by verifying user authenticity before access.

The screenshot displays the Microsoft Entra admin center interface. The left-hand navigation pane is expanded to show the 'ID Protection' section, which includes options like 'Dashboard', 'Risk-based Conditional Access', 'Risky users', and 'Risky workload identities'. The main content area is titled 'Identity Protection | Sign-in risk policy'. It features a search bar and a notification banner recommending migration to Conditional Access. The policy configuration is divided into several sections: 'Protect' (with links to Conditional Access, User risk policy, and the selected Sign-in risk policy), 'Report' (with links to Risky users, Risky workload identities, Risky sign-ins, and Risk detections), 'Settings' (with links to Users at risk detected alerts, Weekly digest, and Settings), and 'Troubleshooting + Support' (with a link to New support request). On the right side, the policy details are shown: 'Policy Name' is 'Sign-in risk remediation policy', 'Assignments' are set to 'All users included and 1 user excluded', and the 'Sign-in risk' threshold is set to 'Medium and above'. The 'Controls' section shows 'Access' is set to 'Require multifactor authentication'. At the bottom, the 'Policy enforcement' is set to 'Enabled', and there is a 'Save' button.

User Risk Policy

- Triggered when abnormal user activity occurs (odd login times, leaked credentials)
- Action: *Require password change*
- Level: *Low and above* — most sensitive policy

The screenshot displays the Microsoft Entra admin center interface. The left-hand navigation pane lists various administrative tasks, with 'ID Protection' expanded to show 'Sign-in risk policy'. The main content area is titled 'Identity Protection | Sign-in risk policy'. It includes a search bar, a breadcrumb trail (Home > Users | Password reset > Password reset | Properties > Identity Protection), and a recommendation banner: 'We recommend migrating sign-in risk policy to Condition...'. The policy configuration is divided into several sections: 'Protect' (containing Conditional Access, User risk policy, and Sign-in risk policy), 'Report' (containing Risky users, Risky workload identities, Risky sign-ins, and Risk detections), 'Settings' (containing Users at risk detected alerts, Weekly digest, and Settings), and 'Troubleshooting + Support' (containing New support request). The 'Sign-in risk policy' section is currently selected, showing a 'Policy Name' of 'Sign-in risk remediation policy', 'Assignments' for 'Users' (All users included and 1 user excluded), and 'Controls' for 'Access' (Require multifactor authentication). At the bottom right, there is a 'Policy enforcement' toggle set to 'Enabled' and a 'Save' button.

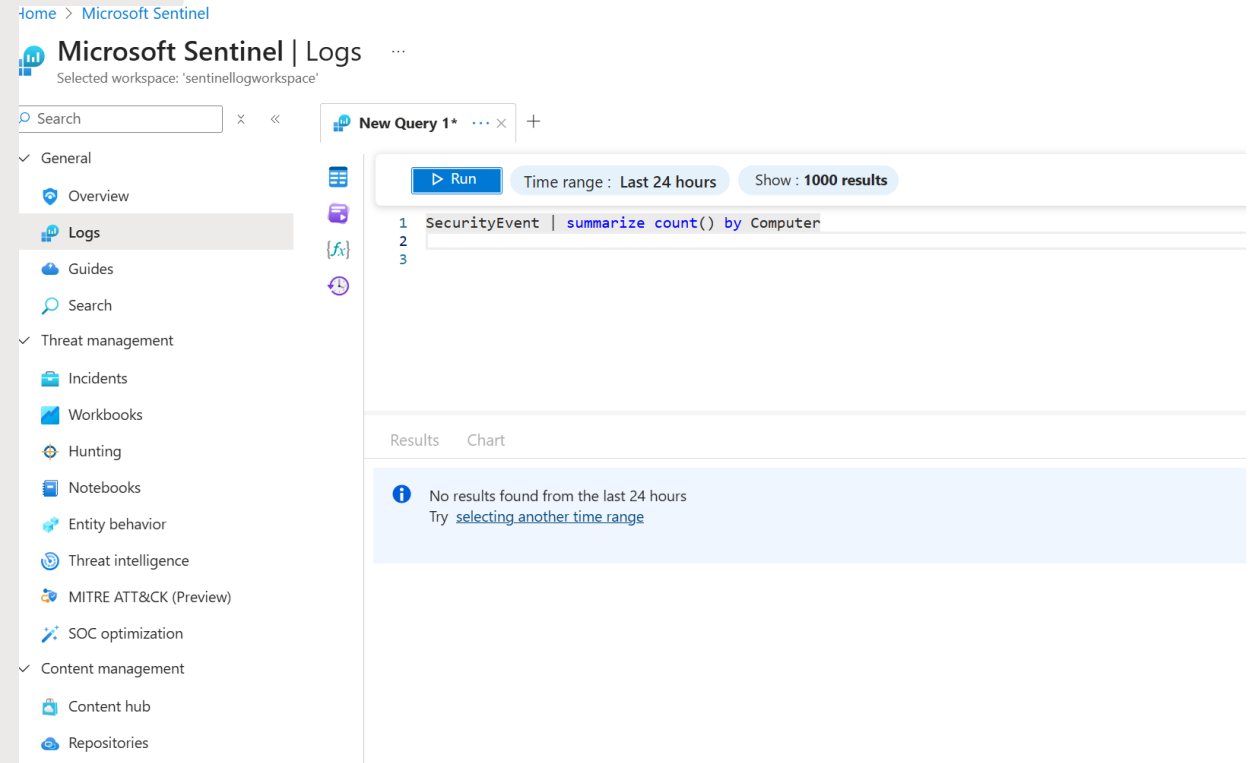
Risky User Monitoring

- In production environments, this report populates automatically with risky sign-ins and behaviors, allowing security teams to take proactive actions.

The screenshot displays the Microsoft Entra admin center interface. The left-hand navigation pane lists various administrative tools, with 'Monitoring & health' expanded to show 'ID Protection'. Under 'ID Protection', 'Risky users' is selected. The main content area is titled 'Identity Protection | Risky users' and includes a search bar, a 'Learn more' link, and a 'Download' button. A notification banner asks if the user wants to allow automatic risk remediation. Below this, there are filters for 'Auto refresh' (set to Off), 'Show dates as' (set to Local), 'Risk state' (2 selected), and 'Status' (Active). A table header shows 'User' with a sort arrow and a 'Risk' column. The table content area currently displays 'No risky users found'. The right-hand pane contains sections for 'Protect' (with links to Conditional Access, User risk policy, Sign-in risk policy, and Multifactor authentication registration policy), 'Report' (with links to Risky users, Risky workload identities, Risky sign-ins, and Risk detections), 'Settings' (with links to Users at risk detected alerts, Weekly digest, and Settings), and 'Troubleshooting + Support' (with a link to New support request).

Sentinel Integration

- Logs can be queried from Microsoft Sentinel for risk correlation.
- Even when no live data is found, this lab demonstrates how Entra Identity Protection can feed SIEM pipelines through *Log Analytics workspace integration*.



Key Takeaways

- ✓ Detect risks automatically using AI signals
- ✓ Enforce MFA or password reset based on risk level
- ✓ Integrate with Sentinel for continuous monitoring
- ✓ Simplify remediation with automation and reports

