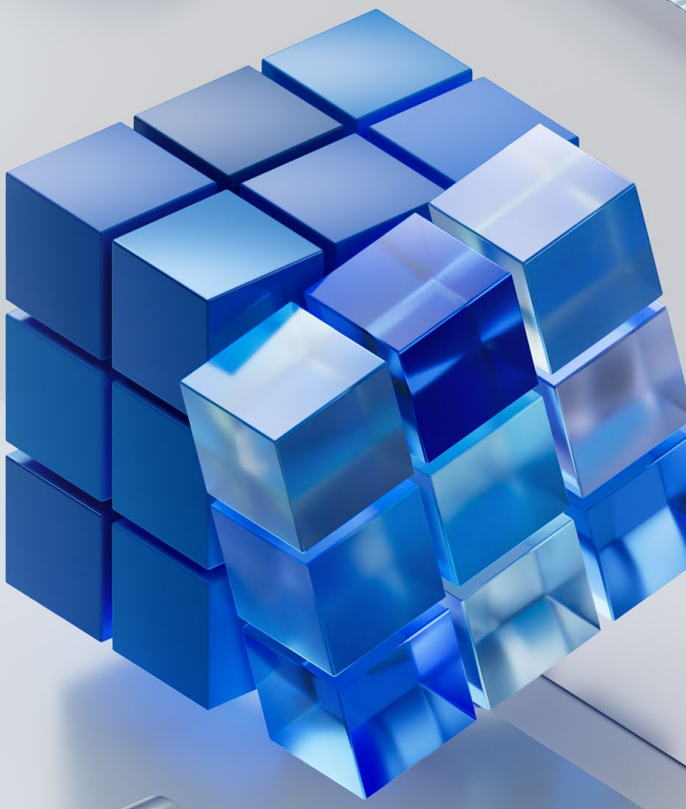
Acronis

Microsoft 365 identity and control-plane attacks



9 real-world threats, what they exploit and how MSPs can reduce risk with Acronis SPM

Modern Microsoft 365 attacks increasingly target the control plane — identities, OAuth applications, permissions, sessions, and configurations — rather than endpoints.

Across recent real-world incidents, attackers used legitimate authentication flows, excessive permissions, weak access controls, and misconfigurations to gain persistent access to Microsoft 365 tenants.

This checklist summarizes:

- The attack techniques used in real incidents.
- What attackers exploited.
- The Microsoft 365 controls recommended to reduce risk.
- How Acronis SPM helps MSPs continuously monitor and enforce secure posture across tenants.

1. Password spraying attacks

Real-world incident

Midnight Blizzard (2024).

Attack technique

Password spray attack against a legacy non-production tenant account.

What was exploited

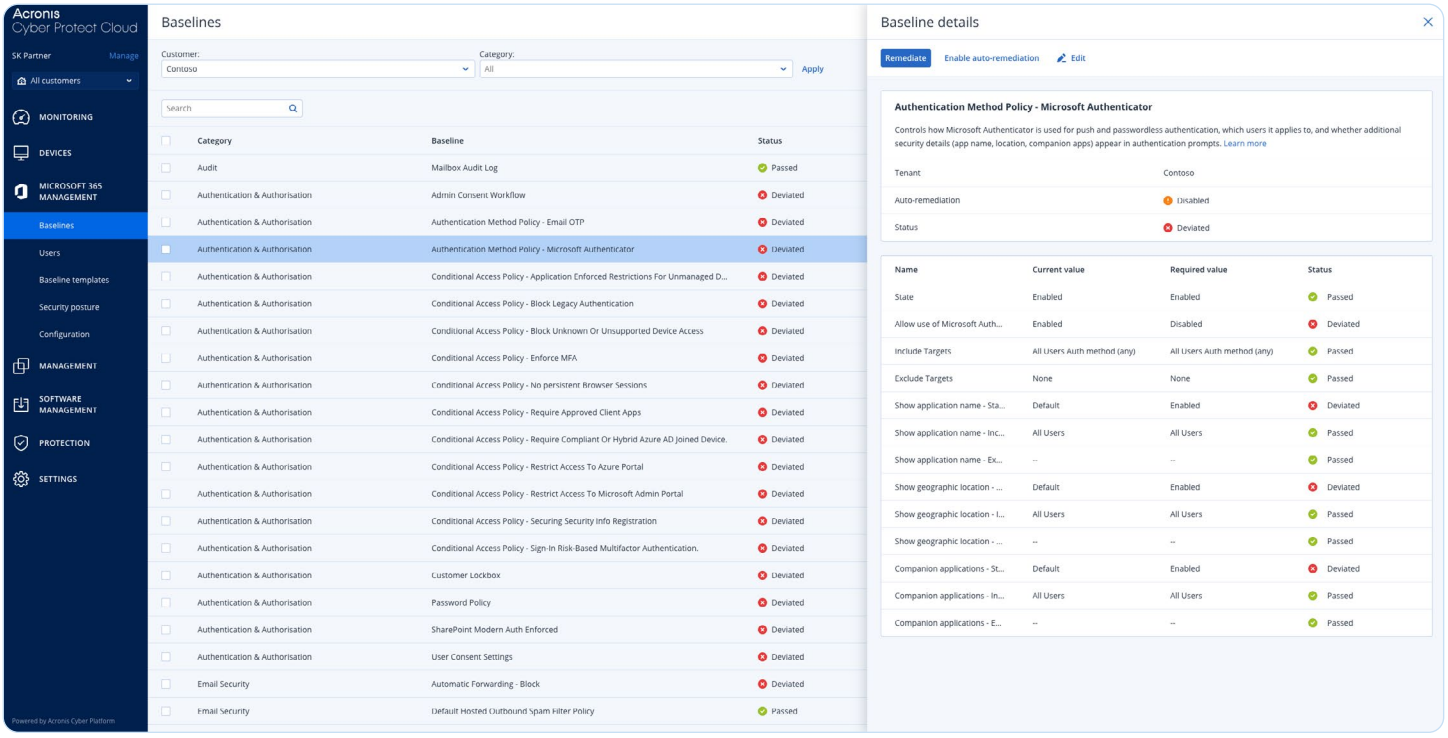
- Weak credentials.
- No MFA on a legacy account.

Security controls to reduce risk

- Enforce MFA.
- Eliminate weak passwords.
- Disable legacy authentication paths.
- Monitor sign-in anomalies.

How Acronis SPM helps

- Identifies MFA gaps.
- Detects insecure authentication settings.
- Monitors baseline deviations across tenants.
- Helps MSPs remediate weak identity configurations before they become attack paths.



2. Token forgery and session abuse

Real-world incident

Storm-0558 (2023).

Attack technique

Forged authentication tokens used to access cloud email accounts.

What was exploited

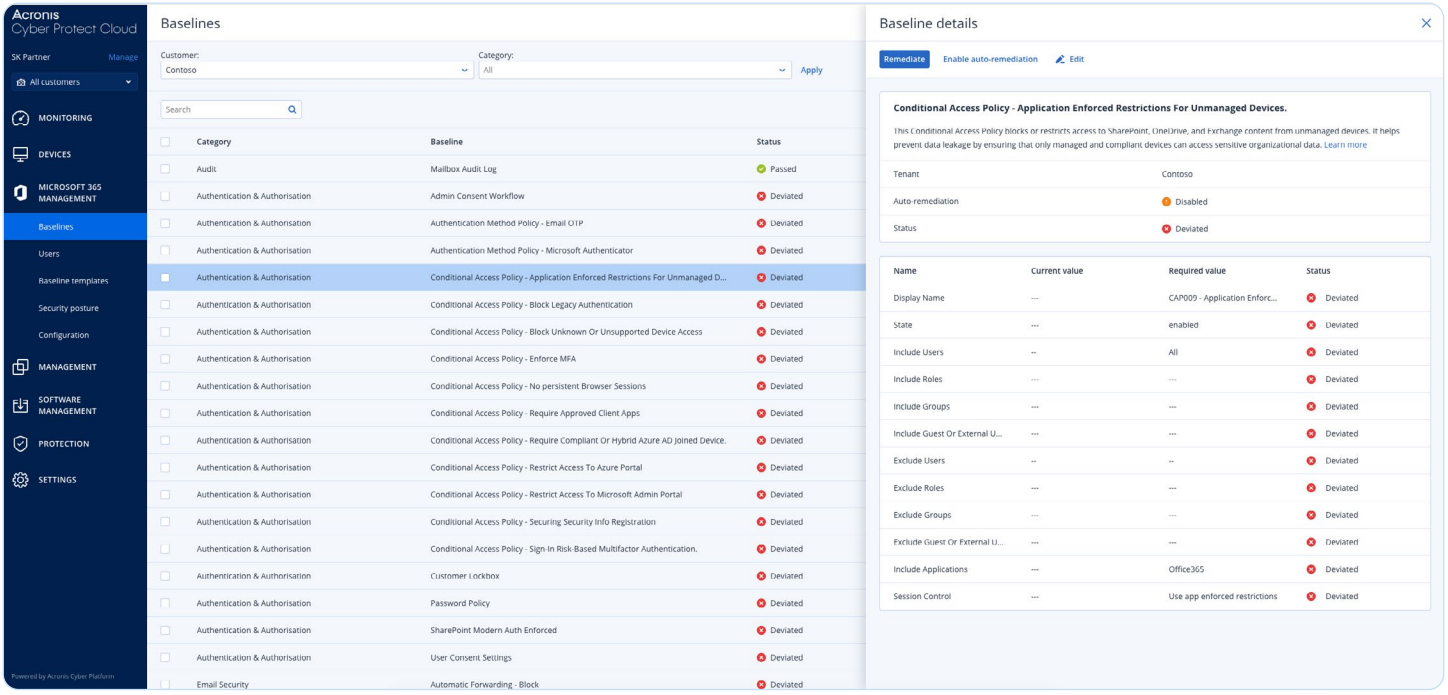
- Token-validation weaknesses.
- Signing-key abuse.
- Limited visibility into anomalous token usage.

Security controls to reduce risk

- Harden identity posture.
- Enforce MFA and Conditional Access.
- Restrict app consent.
- Protect privileged access.
- Monitor token and session anomalies.

How Acronis SPM helps

- Helps standardize MFA and Conditional Access posture.
- Identifies identity configuration drift.
- Supports enforcement of secure admin-access baselines.
- Reduces adjacent tenant-side identity exposure.



3. Session hijacking and AiTM phishing

Real-world incident

Multiple real-world incidents.

Attack technique

Session cookie theft through reverse-proxy phishing.

What was exploited

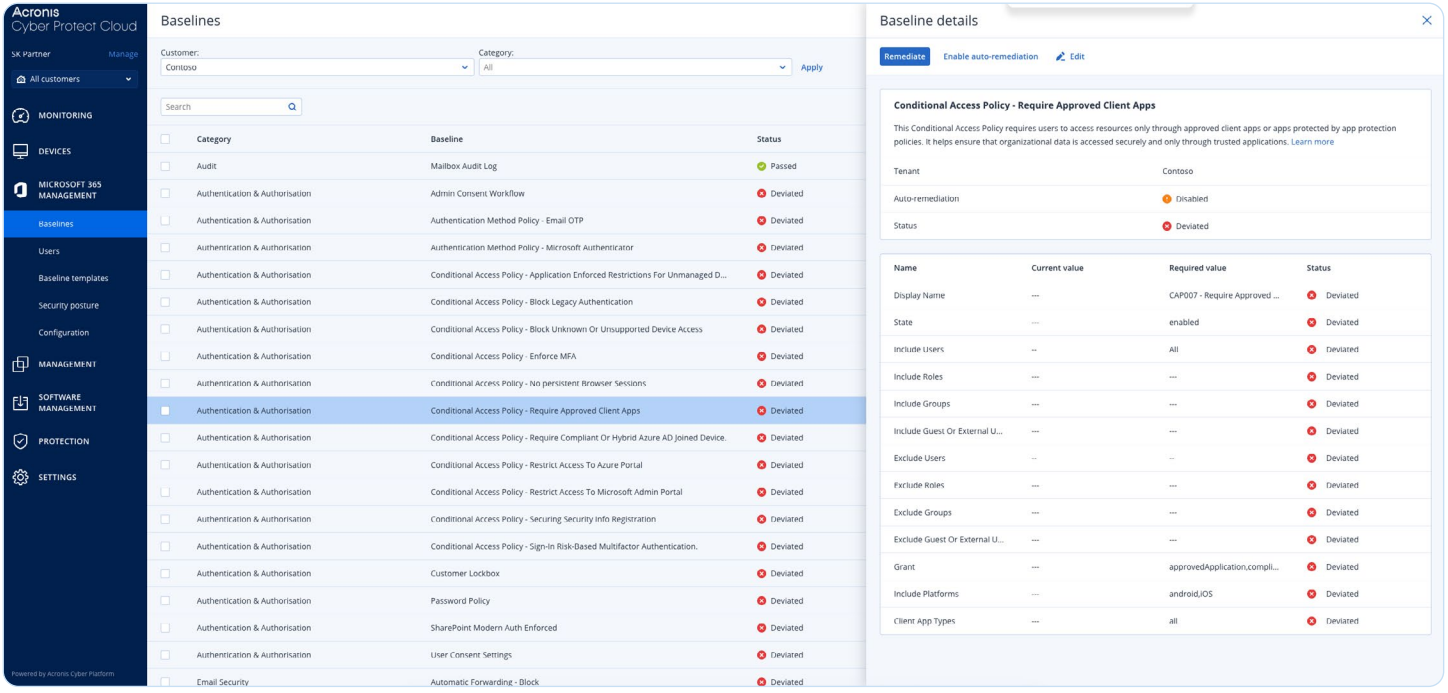
- Stolen authenticated session cookies.
- Weak Conditional Access enforcement.
- Lack of device-based access restrictions.

Security controls to reduce risk

- Require compliant or managed devices
- Enforce Conditional Access.
- Monitor anomalous session behavior.
- Use Continuous Access Evaluation where available.

How Acronis SPM helps

- Detects drift in Conditional Access posture.
- Helps maintain secure access-policy baselines.
- Supports standardization of identity and device-access controls across tenants.



4. Token replay attacks

Real-world incident

Multiple real-world incidents.

Attack technique

Reuse of stolen Primary Refresh Tokens.

What was exploited

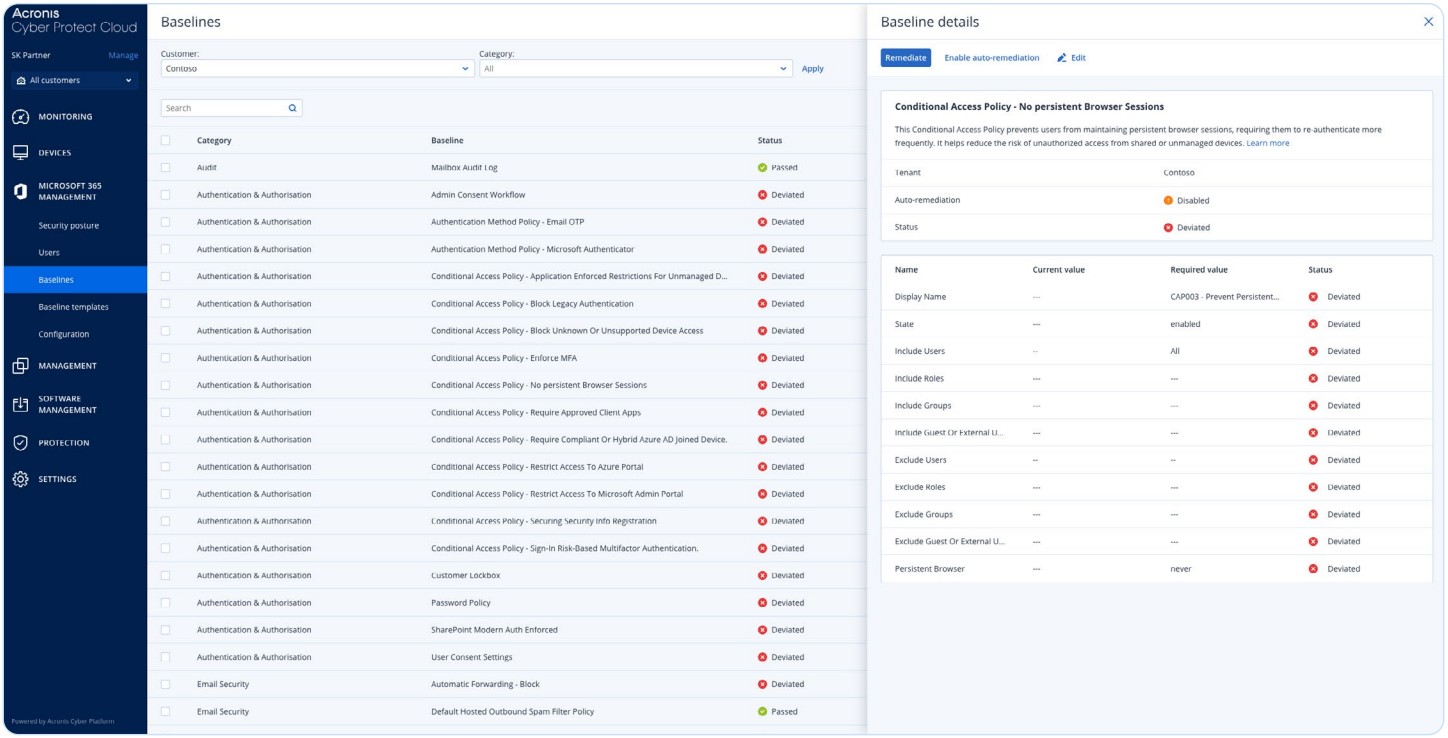
- Lack of token / session protection.
- Weak session enforcement.

Security controls to reduce risk

- Enforce Token Protection where supported.
- Use Conditional Access session controls.
- Restrict access from unmanaged devices.

How Acronis SPM helps

- Helps MSPs continuously monitor authentication posture.
- Detects baseline drift around Conditional Access and session configuration.
- Supports enforcement of secure identity and access baselines.



5. OAuth consent phishing

Real-world incident

Multiple real-world incidents.

Attack technique

Malicious application consent grants.

What was exploited

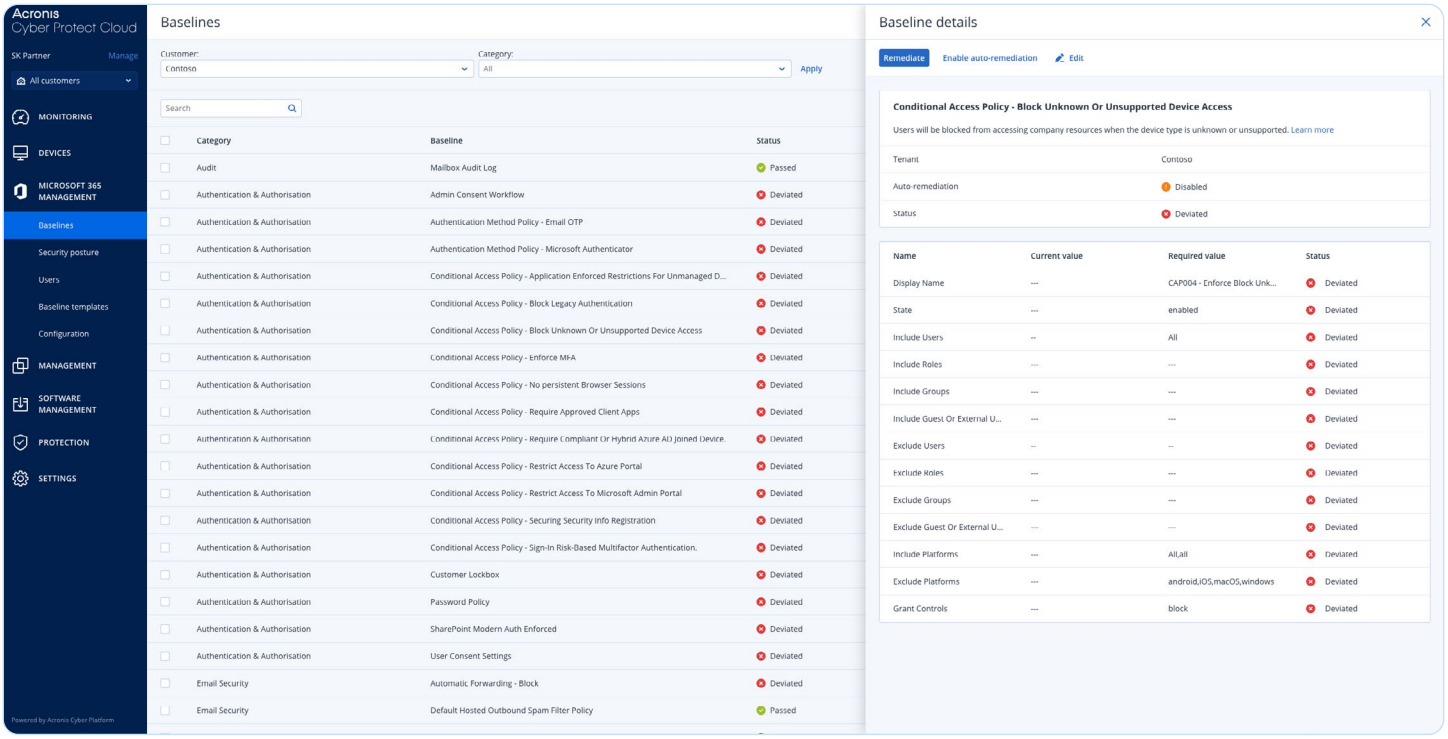
- Unrestricted user consent.
- Weak application governance.

Security controls to reduce risk

- Restrict user consent.
- Require admin approval for applications.
- Allow only verified publishers and low-risk permissions.

How Acronis SPM helps

- Standardizes authorization-related controls.
- Detects drift from approved application-consent policies.
- Helps MSPs maintain secure Microsoft 365 authorization posture across tenants.



6. OAuth app abuse and Graph API data exfiltration

Real-world incident

Multiple real-world incidents.

Attack technique

API-based data access and exfiltration through over-permissioned applications.

What was exploited

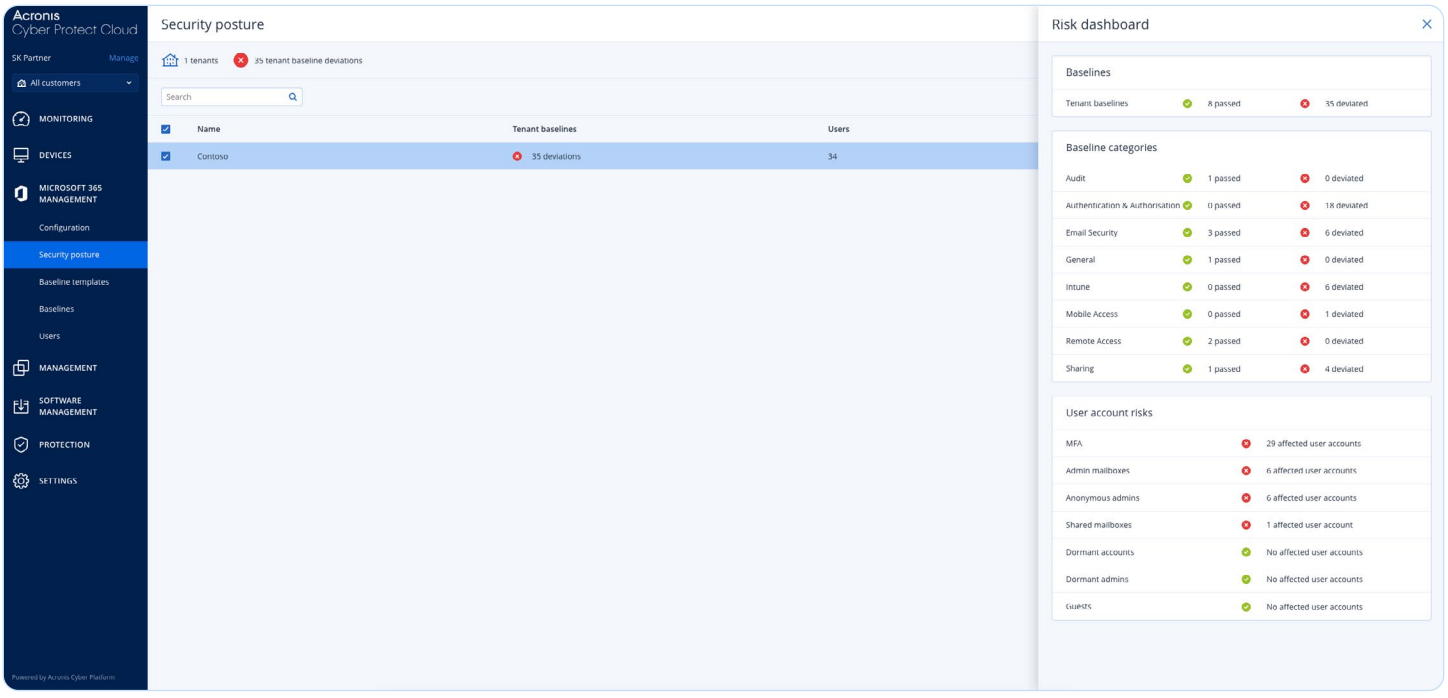
- Excessive Graph permissions.
- Poor visibility into app behavior.
- Unmanaged application access.

Security controls to reduce risk

- Audit application permissions regularly.
- Investigate unusual Graph activity.
- Review apps authorized by external users.

How Acronis SPM helps

- Helps maintain governance over app permissions and consent posture.
- Detects authorization drift and unmanaged app exposure.



7. Privilege escalation and excessive role abuse

Real-world incident

Multiple Entra ID Privilege Escalations / Midnight Blizzard.

Attack technique

Privilege escalation through excessive standing admin privileges.

What was exploited

- Too many Global Admins.
- Privilege creep.
- Weak role governance.

Security controls to reduce risk

- Apply least privilege.
- Restrict standing admin access.
- Review privileged roles continuously.

How Acronis SPM helps

- Identifies excessive admin roles and privilege exposure.
- Helps MSPs standardize secure role posture across tenants.
- Supports enforcement of identity and authorization baselines.

Compliance Posture Summary

Baselines

Current Posture Summary (All time)

Tenant		Group	
Passing:	8	Passing:	-
Deviating:	35	Deviating:	-

Posture Summary (In this period) *

Please noted that baseline created/passing were not recorded before 27/09/2022.
Only Deviations after this date will be accurate.

8. SharePoint and OneDrive exposure

Real-world incident

Multiple real-world incidents.

Attack technique

Excessive or accidental external sharing.

What was exploited

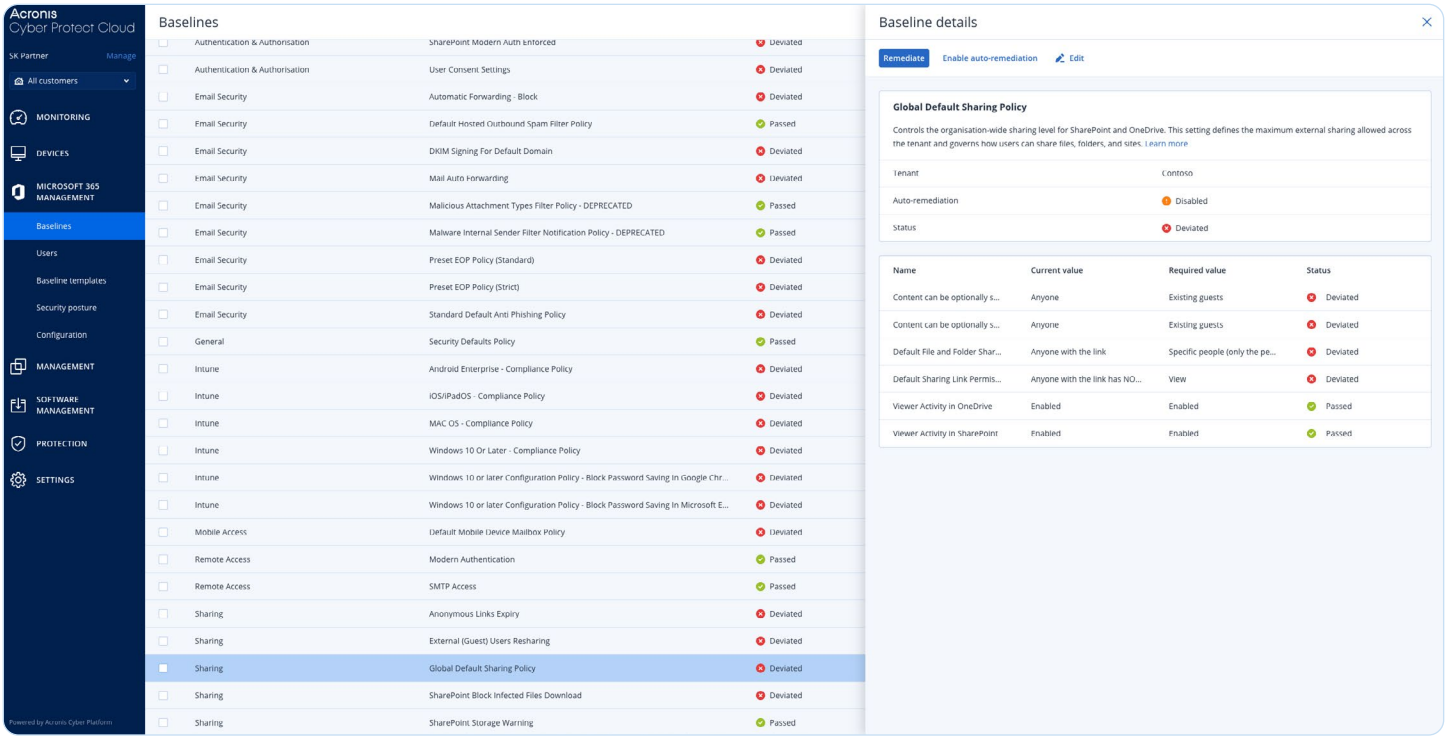
- Weak sharing governance.
- Overly permissive external access settings.

Security controls to reduce risk

- Configure organization-level external sharing policies.
- Restrict sharing where required.
- Review sharing posture regularly.

How Acronis SPM helps

- Continuously validates sharing posture against baselines.
- Detects risky sharing configurations.
- Reduces long-term configuration drift across tenants.



9. Audit and investigation gaps

Real-world incident

Incident Investigations.

Attack technique

Post-compromise activity hidden by insufficient auditing.

What was exploited

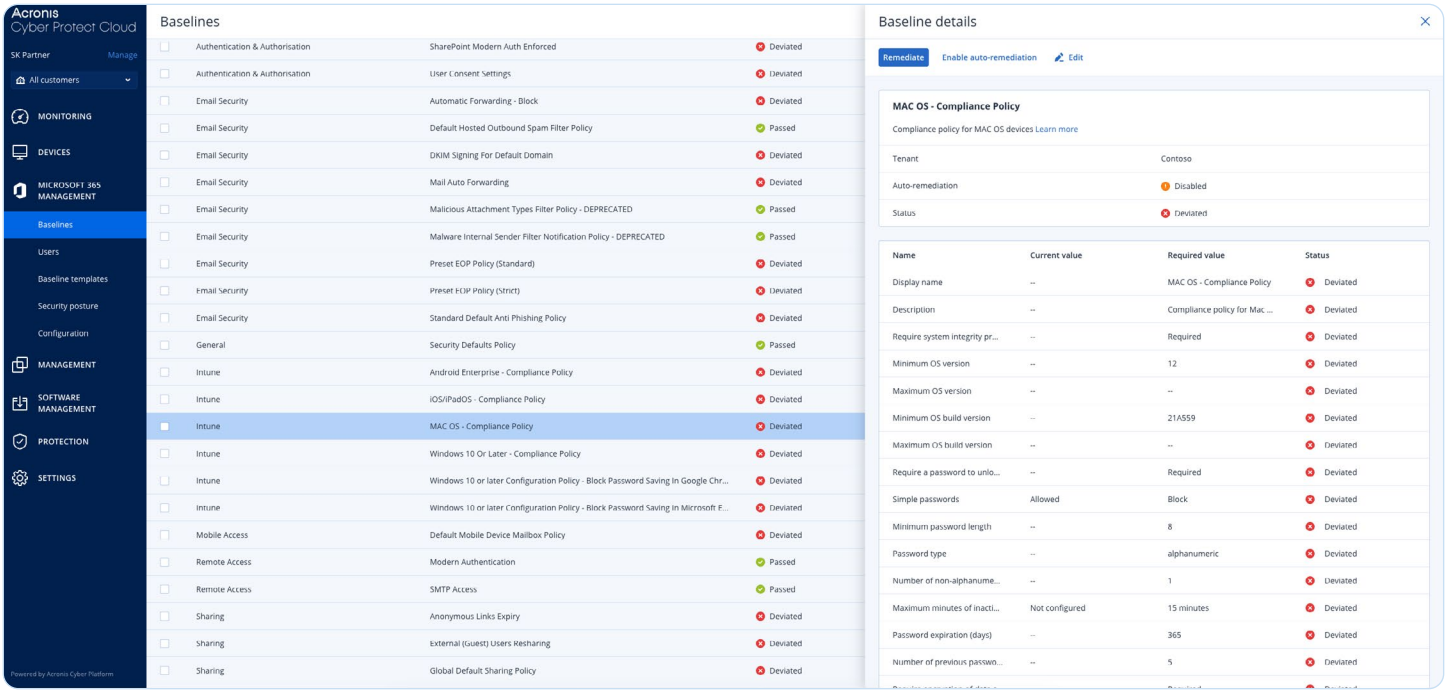
- Missing or incomplete audit evidence.
- Weak investigation readiness.

Security controls to reduce risk

- Keep Microsoft Purview auditing enabled.
- Ensure investigators have appropriate access.
- Maintain audit-search readiness.

How Acronis SPM helps

- Helps MSPs monitor audit-related configuration posture.
- Detects drift in logging and audit settings.
- Supports ongoing investigation and compliance readiness.



What these attacks have in common

Across all incidents:

- Entry is identity-based.
- Persistence is configuration-based.
- Impact is tenant-wide.

Why continuous posture management matters

Modern Microsoft 365 attacks succeed when:

- Misconfigurations persist.
- Security posture drifts over time.
- Visibility gaps remain unnoticed across tenants.

How Acronis SPM helps MSPs reduce risk

- Centrally manage Microsoft 365 posture across tenants.
- Continuously monitor security posture against baselines.
- Detect new risks and configuration drift automatically.
- Apply reusable baseline templates.
- Automate and streamline remediation.
- Simplify onboarding and offboarding workflows.
- Standardize Microsoft 365 security posture at scale.

Explore how Acronis SPM helps MSPs secure Microsoft 365 at scale

Scan to book an Acronis SPM demo