

Meridian Institute – Microsoft 365 Security Operations Lab

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Executive Overview

The Meridian Institute Microsoft 365 Security Operations Lab is a multi-phase enterprise simulation demonstrating Microsoft 365 administration, identity governance, endpoint management, security operations, compliance controls, and automation.

The project models how a mid-sized educational institution can securely manage users, devices, access controls, and organizational data using Microsoft 365 enterprise technologies and Microsoft security best practices.

Business Challenge

Educational institutions require secure identity management, endpoint governance, access control, and compliance monitoring while supporting students, faculty, and operational staff.

Key challenges addressed:

- * User onboarding and lifecycle management
- * Identity governance and RBAC
- * Multi-factor authentication enforcement
- * Endpoint compliance and security
- * Data loss prevention and retention
- * Security monitoring and threat detection
- * Zero-touch device deployment

Solution Implemented

The environment was designed using:

- * Microsoft Entra ID
- * Microsoft Intune
- * Microsoft Defender XDR
- * Microsoft Purview
- * Exchange Online
- * Windows Autopilot
- * Microsoft Graph PowerShell

The solution demonstrates an end-to-end Microsoft 365 operational lifecycle from identity provisioning through endpoint management, compliance enforcement, and security monitoring.

Key Metrics

| Metric | Result |
|-----------------------------|--------|
| Managed Users | 27 |
| Conditional Access Policies | 9 |

| | | |
|--------------------------|---------|--|
| Security Groups | 5+ | |
| Compliance Policies | 3 | |
| Secure Score Improvement | 54 → 79 | |
| Project Phases | 6 | |

Architecture Summary

Users → Microsoft Entra ID → Licensing & Groups → Conditional Access → Intune → Windows Autopilot → Microsoft Defender XDR → Secure Business Outcomes

Supporting services include Exchange Online Protection and Microsoft Purview governance controls.

Key Outcomes

- * Implemented enterprise identity governance using Microsoft Entra ID
- * Configured Conditional Access policies and MFA enforcement
- * Managed endpoint compliance using Microsoft Intune
- * Planned Windows Autopilot zero-touch deployment
- * Implemented Purview DLP and retention controls
- * Improved Secure Score from 54 to 79
- * Demonstrated Microsoft Graph PowerShell automation workflows
- * Produced enterprise-grade operational documentation

Technologies

Microsoft Entra ID • Microsoft Intune • Microsoft Defender XDR • Microsoft Purview • Exchange Online • Windows Autopilot • Microsoft Graph PowerShell • Conditional Access • MFA • RBAC

Conclusion

This project demonstrates practical Microsoft 365 administration, security operations, endpoint management, compliance governance, and automation capabilities within a simulated enterprise environment. It serves as a portfolio showcase of modern Microsoft 365 operational practices and security-first administration principles.