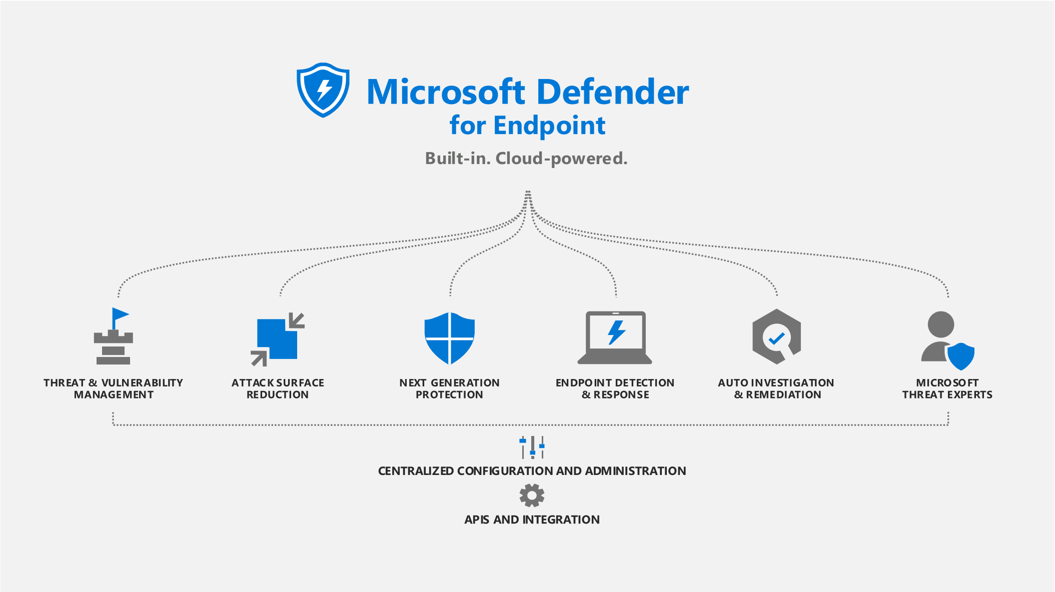
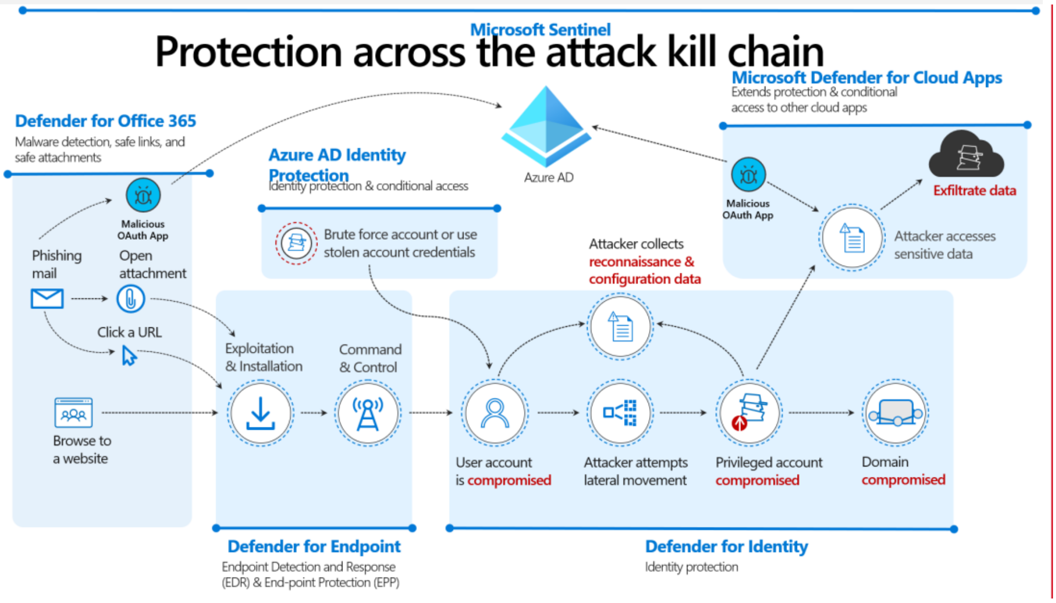
Attendees will get an opportunity to try their hands at configuration, detection and security analysis using MS tools such as the Defender XDR products and Azure Sentinel.
The workshop is aimed at security analysts and technical staff looking to learn or get more out of the security consoles provided within the Microsoft E5 suite. "Best Practices" for configuration of Defender for Endpoints, Defender for Office and Cloud App Security will be covered, as well as analysis and mitigation of real attack scenarios.

The workshop is created by Kent Husvik and Kjetil Nordlund Microsoft Norway.


Microsoft Defender
for Endpoint
Built-in. Cloud-powered.
THREAT & VULNERABILITY MANAGEMENT
ATTACK SURFACE REDUCTION
NEXT GENERATION PROTECTION
ENDPOINT DETECTION & RESPONSE
AUTO INVESTIGATION & REMEDIATION
MICROSOFT THREAT EXPERTS
CENTRALIZED CONFIGURATION AND ADMINISTRATION
APIS AND INTEGRATION


Microsoft Sentinel
Protection across the attack kill chain
Defender for Office 365
Malware detection, safe links, and safe attachments
Azure AD Identity Protection
Identity protection & conditional access
Azure AD
Microsoft Defender for Cloud Apps
Extends protection & conditional access to other cloud apps
Malicious OAuth App
Phishing mail
Open attachment
Click a URL
Browse to a website
Brute force account or use stolen account credentials
Exploitation & Installation
Command & Control
Attacker collects reconnaissance & configuration data
Malicious OAuth App
Exfiltrate data
Attacker accesses sensitive data
User account is compromised
Attacker attempts lateral movement
Privileged account compromised
Domain compromised
Defender for Endpoint
Endpoint Detection and Response (EDR) & End-point Protection (EPP)
Defender for Identity
Identity protection

CONTENTS

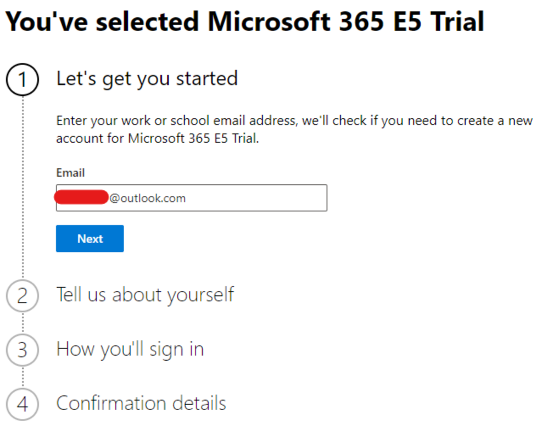
PREREQUISITES

PRE WORKSHOP - PREPERATIONS

Create a New Email account, like Outlook.com or any other that you like.

Create a M365 E5 Trial and connect it to the newly created Email account

Use the newly created email account in the registration form



You've selected Microsoft 365 E5 Trial

1 Let's get you started

Enter your work or school email address, we'll check if you need to create a new account for Microsoft 365 E5 Trial.

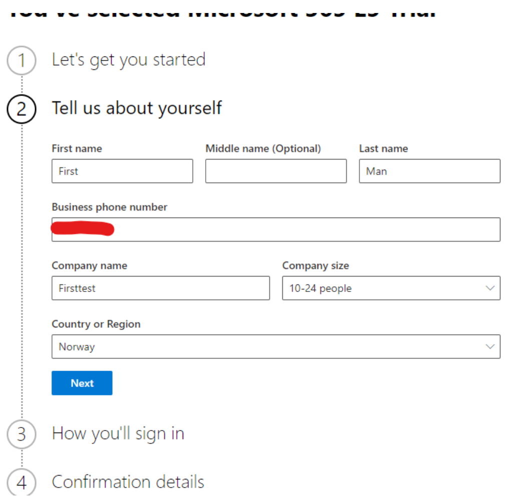
Email

[redacted]@outlook.com

2 Tell us about yourself

3 How you'll sign in

4 Confirmation details



You've selected Microsoft 365 E5 Trial

1 Let's get you started

2 Tell us about yourself

First name: First

Middle name (Optional):

Last name: Man

Business phone number: [redacted]

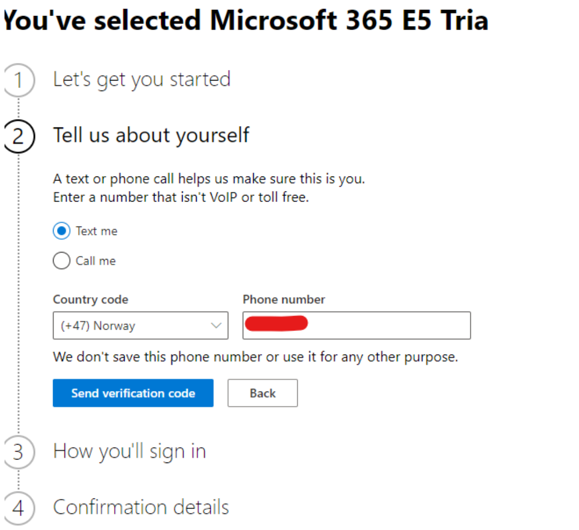
Company name: Firsttest

Company size: 10-24 people

Country or Region: Norway

3 How you'll sign in

4 Confirmation details



You've selected Microsoft 365 E5 Tria

1 Let's get you started

2 Tell us about yourself

A text or phone call helps us make sure this is you.
Enter a number that isn't VoIP or toll free.

● Text me

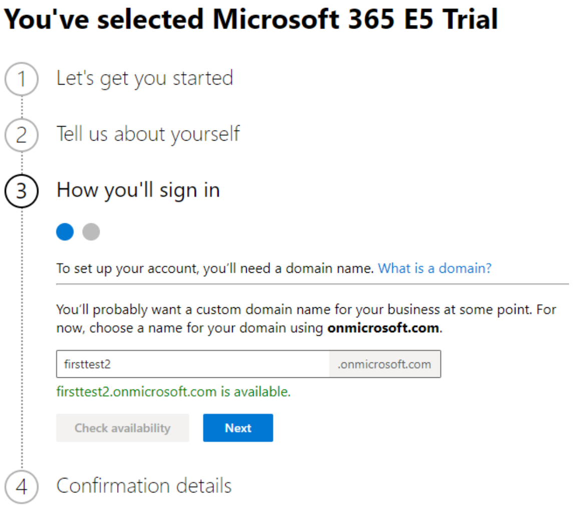
○ Call me

Country code	Phone number
(+47) Norway	[redacted]

We don't save this phone number or use it for any other purpose.

3 How you'll sign in

4 Confirmation details



You've selected Microsoft 365 E5 Trial

1 Let's get you started

2 Tell us about yourself

3 How you'll sign in

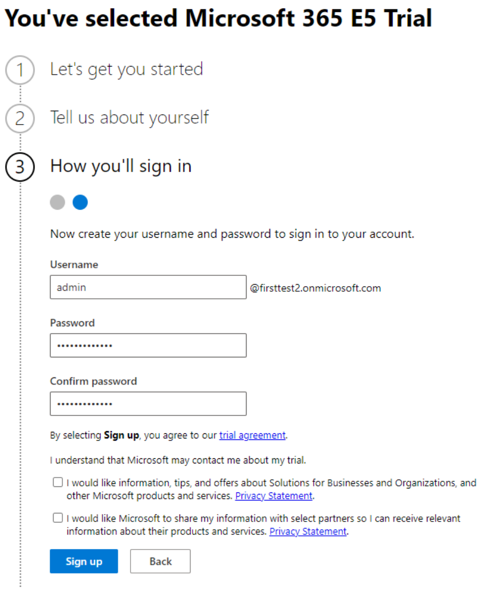
To set up your account, you'll need a domain name. What is a domain?

You'll probably want a custom domain name for your business at some point. For now, choose a name for your domain using **onmicrosoft.com**.

firsttest2 .onmicrosoft.com

firsttest2.onmicrosoft.com is available.

4 Confirmation details



You've selected Microsoft 365 E5 Trial

1 Let's get you started

2 Tell us about yourself

3 How you'll sign in

Now create your username and password to sign in to your account.

Username: admin @firsttest2.onmicrosoft.com

Password: •••••••••••••

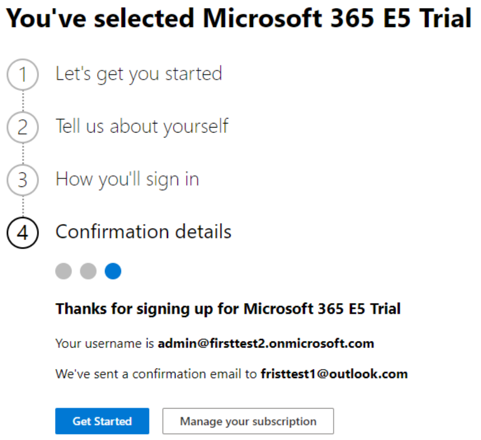
Confirm password: •••••••••••••

By selecting **Sign up**, you agree to our trial agreement.

I understand that Microsoft may contact me about my trial.

□ I would like information, tips, and offers about Solutions for Businesses and Organizations, and other Microsoft products and services. Privacy Statement.

□ I would like Microsoft to share my information with select partners so I can receive relevant information about their products and services. Privacy Statement.



You've selected Microsoft 365 E5 Trial

1 Let's get you started

2 Tell us about yourself

3 How you'll sign in

4 Confirmation details

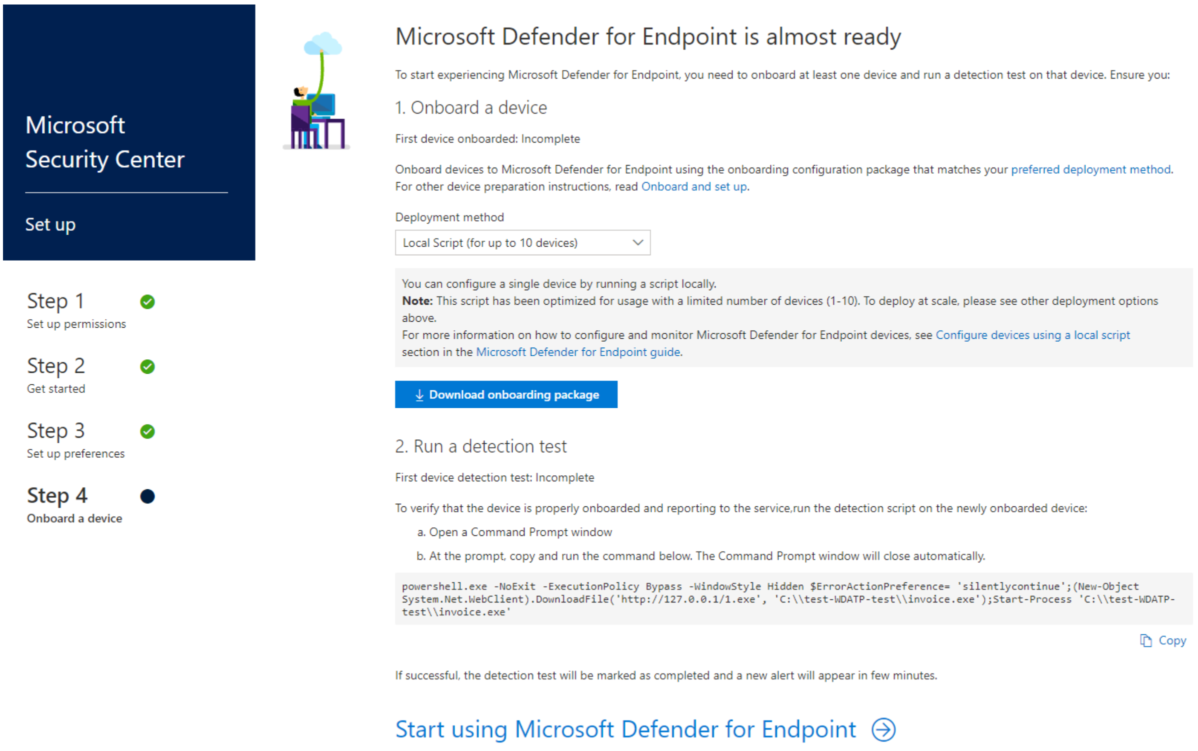
Thanks for signing up for Microsoft 365 E5 Trial

Your username is **admin@firsttest2.onmicrosoft.com**

We've sent a confirmation email to **fristtest1@outlook.com**

Complete the wizard.

Click on Get Started complete the steps required on Data storage location. If any service error message are being displayed, wait a few minutes on the backend provisioning and try again.



Microsoft Defender for Endpoint is almost ready

To start experiencing Microsoft Defender for Endpoint, you need to onboard at least one device and run a detection test on that device. Ensure you:

1. Onboard a device

First device onboarded: Incomplete

Onboard devices to Microsoft Defender for Endpoint using the onboarding configuration package that matches your preferred deployment method. For other device preparation instructions, read Onboard and set up.

Deployment method

Local Script (for up to 10 devices)

You can configure a single device by running a script locally.
Note: This script has been optimized for usage with a limited number of devices (1-10). To deploy at scale, please see other deployment options above.
For more information on how to configure and monitor Microsoft Defender for Endpoint devices, see Configure devices using a local script section in the Microsoft Defender for Endpoint guide.

2. Run a detection test

First device detection test: Incomplete

To verify that the device is properly onboarded and reporting to the service,run the detection script on the newly onboarded device:

a. Open a Command Prompt window

b. At the prompt, copy and run the command below. The Command Prompt window will close automatically.

```
powershell.exe -NoExit -ExecutionPolicy Bypass -WindowStyle Hidden $ErrorActionPreference= 'silentlycontinue';(New-Object
System.Net.WebClient).DownloadFile('http://127.0.0.1/1.exe', 'C:\\test-WDATP-test\\invoice.exe');Start-Process 'C:\\test-WDATP-
test\\invoice.exe'
```

If successful, the detection test will be marked as completed and a new alert will appear in few minutes.

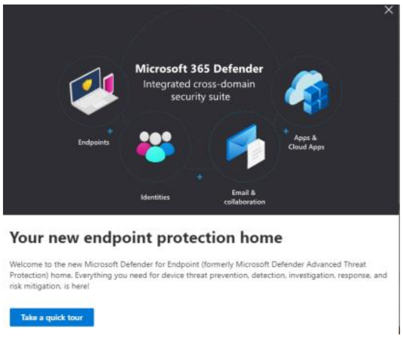
DATA STORAGE LOCATION

Defender for Endpoint operates in the Microsoft Azure datacenters in the European Union, the United Kingdom, or in the United States. Customer data collected by the service may be stored in: (a) the geo-location of the tenant as identified during provisioning or, (b) if Defender for Endpoint uses another Microsoft online service to process such data, the geolocation as defined by the data storage rules of that other online service.

SETTINGS AND PREVIEW FEATURES

SECURITY CONSOLE WELCOME WIZARD

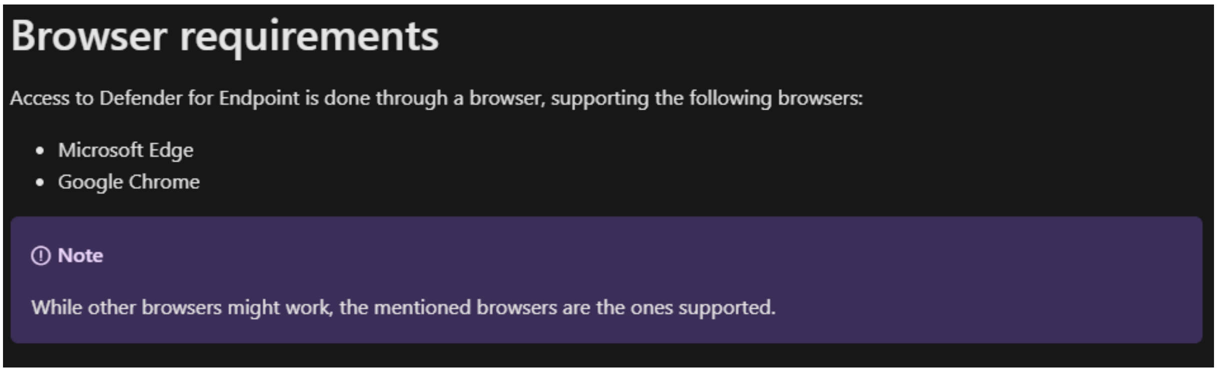
Navigate in a supported browser to Security.microsoft.com and complete the wizard.



Your new endpoint protection home

Welcome to the new Microsoft Defender for Endpoint (formerly Microsoft Defender Advanced Threat Protection) home. Everything you need for device threat prevention, detection, investigation, response, and risk mitigation, is here!

Minimum requirements for Microsoft Defender for Endpoint | Microsoft Docs



Browser requirements

Access to Defender for Endpoint is done through a browser, supporting the following browsers:

- Microsoft Edge
- Google Chrome

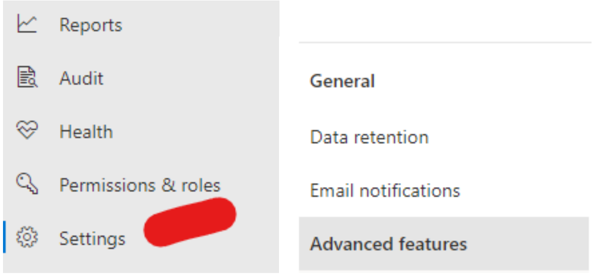
ⓘ Note

While other browsers might work, the mentioned browsers are the ones supported.

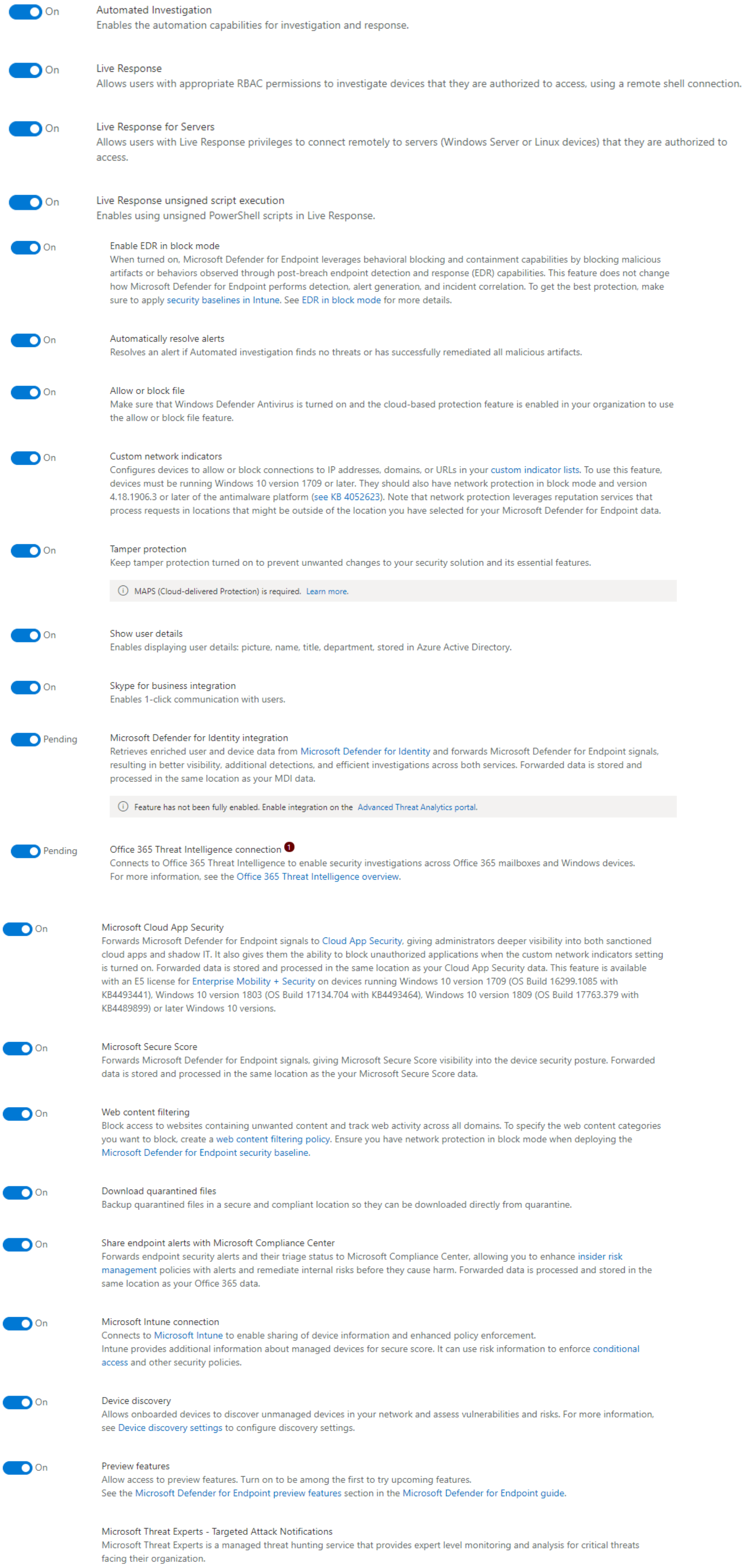
Turn on Preview features and other features:

Turn on the preview experience setting to be among the first to try upcoming features.

1. In the navigation pane, select **Settings** > **Endpoints** > **Advanced features** > **Preview features**.



2. Toggle the setting between **On** and **Off** and select **Save preferences**.
3. Reload the console and find your way back to **Settings** > **Endpoints** > **Advanced features**
4. Activate all features Except “Restrict correlation to within scoped device groups”



On

Automated Investigation

Enables the automation capabilities for investigation and response.

On

Live Response

Allows users with appropriate RBAC permissions to investigate devices that they are authorized to access, using a remote shell connection.

On

Live Response for Servers

Allows users with Live Response privileges to connect remotely to servers (Windows Server or Linux devices) that they are authorized to access.

On

Live Response unsigned script execution

Enables using unsigned PowerShell scripts in Live Response.

On

Enable EDR in block mode

When turned on, Microsoft Defender for Endpoint leverages behavioral blocking and containment capabilities by blocking malicious artifacts or behaviors observed through post-breach endpoint detection and response (EDR) capabilities. This feature does not change how Microsoft Defender for Endpoint performs detection, alert generation, and incident correlation. To get the best protection, make sure to apply security baselines in Intune. See EDR in block mode for more details.

On

Automatically resolve alerts

Resolves an alert if Automated investigation finds no threats or has successfully remediated all malicious artifacts.

On

Allow or block file

Make sure that Windows Defender Antivirus is turned on and the cloud-based protection feature is enabled in your organization to use the allow or block file feature.

On

Custom network indicators

Configures devices to allow or block connections to IP addresses, domains, or URLs in your custom indicator lists. To use this feature, devices must be running Windows 10 version 1709 or later. They should also have network protection in block mode and version 4.18.1906.3 or later of the antimalware platform (see KB 4052623). Note that network protection leverages reputation services that process requests in locations that might be outside of the location you have selected for your Microsoft Defender for Endpoint data.

On

Tamper protection

Keep tamper protection turned on to prevent unwanted changes to your security solution and its essential features.

ⓘ MAPS (Cloud-delivered Protection) is required. Learn more.

On

Show user details

Enables displaying user details: picture, name, title, department, stored in Azure Active Directory.

On

Skype for business integration

Enables 1-click communication with users.

Pending

Microsoft Defender for Identity integration

Retrieves enriched user and device data from Microsoft Defender for Identity and forwards Microsoft Defender for Endpoint signals, resulting in better visibility, additional detections, and efficient investigations across both services. Forwarded data is stored and processed in the same location as your MDI data.

ⓘ Feature has not been fully enabled. Enable integration on the Advanced Threat Analytics portal.

Pending

Office 365 Threat Intelligence connection !

Connects to Office 365 Threat Intelligence to enable security investigations across Office 365 mailboxes and Windows devices.
For more information, see the Office 365 Threat Intelligence overview.

On

Microsoft Cloud App Security

Forwards Microsoft Defender for Endpoint signals to Cloud App Security, giving administrators deeper visibility into both sanctioned cloud apps and shadow IT. It also gives them the ability to block unauthorized applications when the custom network indicators setting is turned on. Forwarded data is stored and processed in the same location as your Cloud App Security data. This feature is available with an E5 license for Enterprise Mobility + Security on devices running Windows 10 version 1709 (OS Build 16299.1085 with KB4493441), Windows 10 version 1803 (OS Build 17134.704 with KB4493464), Windows 10 version 1809 (OS Build 17763.379 with KB4489899) or later Windows 10 versions.

On

Microsoft Secure Score

Forwards Microsoft Defender for Endpoint signals, giving Microsoft Secure Score visibility into the device security posture. Forwarded data is stored and processed in the same location as the your Microsoft Secure Score data.

On

Web content filtering

Block access to websites containing unwanted content and track web activity across all domains. To specify the web content categories you want to block, create a web content filtering policy. Ensure you have network protection in block mode when deploying the Microsoft Defender for Endpoint security baseline.

On

Download quarantined files

Backup quarantined files in a secure and compliant location so they can be downloaded directly from quarantine.

On

Share endpoint alerts with Microsoft Compliance Center

Forwards endpoint security alerts and their triage status to Microsoft Compliance Center, allowing you to enhance insider risk management policies with alerts and remediate internal risks before they cause harm. Forwarded data is processed and stored in the same location as your Office 365 data.

On

Microsoft Intune connection

Connects to Microsoft Intune to enable sharing of device information and enhanced policy enforcement.
Intune provides additional information about managed devices for secure score. It can use risk information to enforce conditional access and other security policies.

On

Device discovery

Allows onboarded devices to discover unmanaged devices in your network and assess vulnerabilities and risks. For more information, see Device discovery settings to configure discovery settings.

On

Preview features

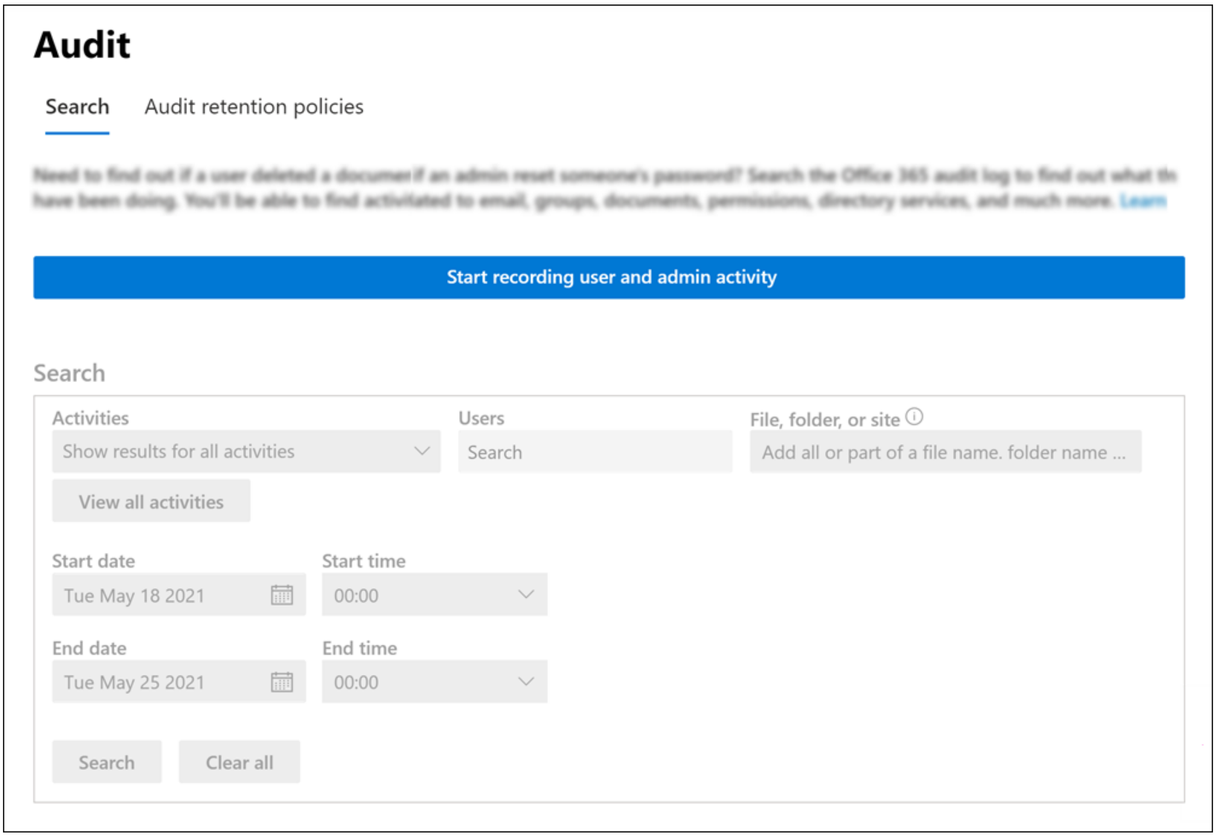
Allow access to preview features. Turn on to be among the first to try upcoming features.
See the Microsoft Defender for Endpoint preview features section in the Microsoft Defender for Endpoint guide.

Microsoft Threat Experts - Targeted Attack Notifications

Microsoft Threat Experts is a managed threat hunting service that provides expert level monitoring and analysis for critical threats facing their organization.

TURN ON AUDITING

1. If auditing is not turned on for your organization, you can turn it on in the Microsoft 365 compliance center or by using Exchange Online PowerShell. It may take several hours after you turn on auditing before you can return results when you search the audit log.
2. Use the compliance center to turn on auditing
3. Go to compliance.microsoft.com and sign in.
4. In the left navigation pane of the Microsoft 365 compliance center, click **Audit**.
5. If auditing is not turned on for your organization, a banner is displayed prompting you start recording user and admin activity.



Need to find out if a user deleted a document if an admin reset someone's password? Search the Office 365 audit log to find out what th have been doing. You'll be able to find activitated to email, groups, documents, permissions, directory services, and much more. Learn

Activities: Show results for all activities

Users: Search

File, folder, or site: Add all or part of a file name. folder name ...

Start date: Tue May 18 2021

Start time: 00:00

End date: Tue May 25 2021

End time: 00:00

6.
7. Click the **Start recording user and admin activity** banner.
8. It may take up to 60 minutes for the change to take effect.

TEST USERS AND GROUPS

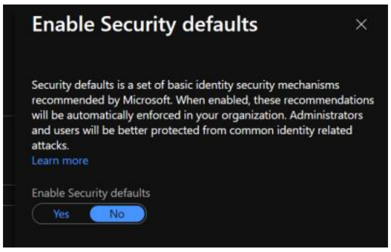
Create at least three regular users in your Azure AD tenant in addition to your Global Administrator user created when activated the tenant.

Create at least three Azure AD groups in your Azure AD tenant.

TURN OFF "SECURITY DEFAULTS"

To be able to test Conditional Access policies, the default enabled "Security Defaults" need to be turned off first.

Disabling Security Defaults: Azure Active Directory security defaults | Microsoft Docs



Enable Security defaults

Security defaults is a set of basic identity security mechanisms recommended by Microsoft. When enabled, these recommendations will be automatically enforced in your organization. Administrators and users will be better protected from common identity related attacks.
Learn more

Enable Security defaults
Yes [✓ No]

To disable security defaults in your directory:

1. Sign in to the Azure portal as a security administrator, Conditional Access administrator, or global administrator.
2. Browse to **Azure Active Directory** > **Properties**.
3. Select **Manage security defaults**.
4. Set the **Enable security defaults** toggle to **No**.

ENABLE BASIC CONDITIONAL ACCESS POLICIES

To maintain the security level in your Azure AD tenant, create one Conditional Access policy enforcing MFA for all your users.

NB! Make sure your Global Admin users (and other test users) is enrolled with MFA information before you activate MFA requirement for all users.

https://mysignins.microsoft.com/security-info

Follow these steps to create a Conditional access policy requiring MFA for all users:
Conditional Access - Require MFA for all users - Azure Active Directory | Microsoft Docs

In addition, create one Conditional Access policy to block use of all Legacy authentication protocols in your tenant.

WORKSHOP START

AZURE ACTIVE DIRECTORY IDENTITY PROTECTION

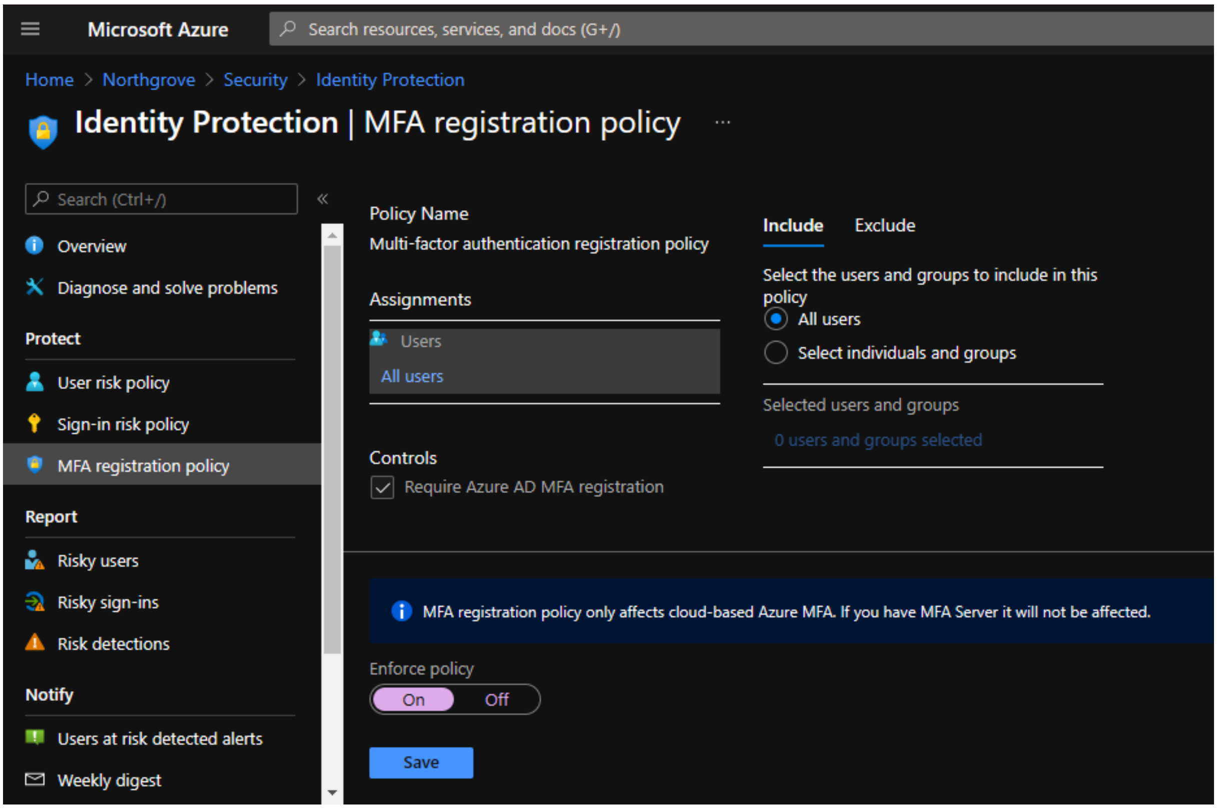
SETUP AND CONFIGURATION

Configure Azure AD Identity protection risk policies - Azure AD Identity Protection policies | Microsoft Docs

Configuration is done in the Azure Portal -> https://portal.azure.com -> Azure Active Directory -> Security -> Identity Protection

Deep link: Identity Protection - Microsoft Azure

Create an MFA registration Policy:



Identity Protection | MFA registration policy

Policy Name
Multi-factor authentication registration policy

Assignments
Users
All users

Controls
☑ Require Azure AD MFA registration

Select the users and groups to include in this policy
● All users
○ Select individuals and groups

Selected users and groups
0 users and groups selected

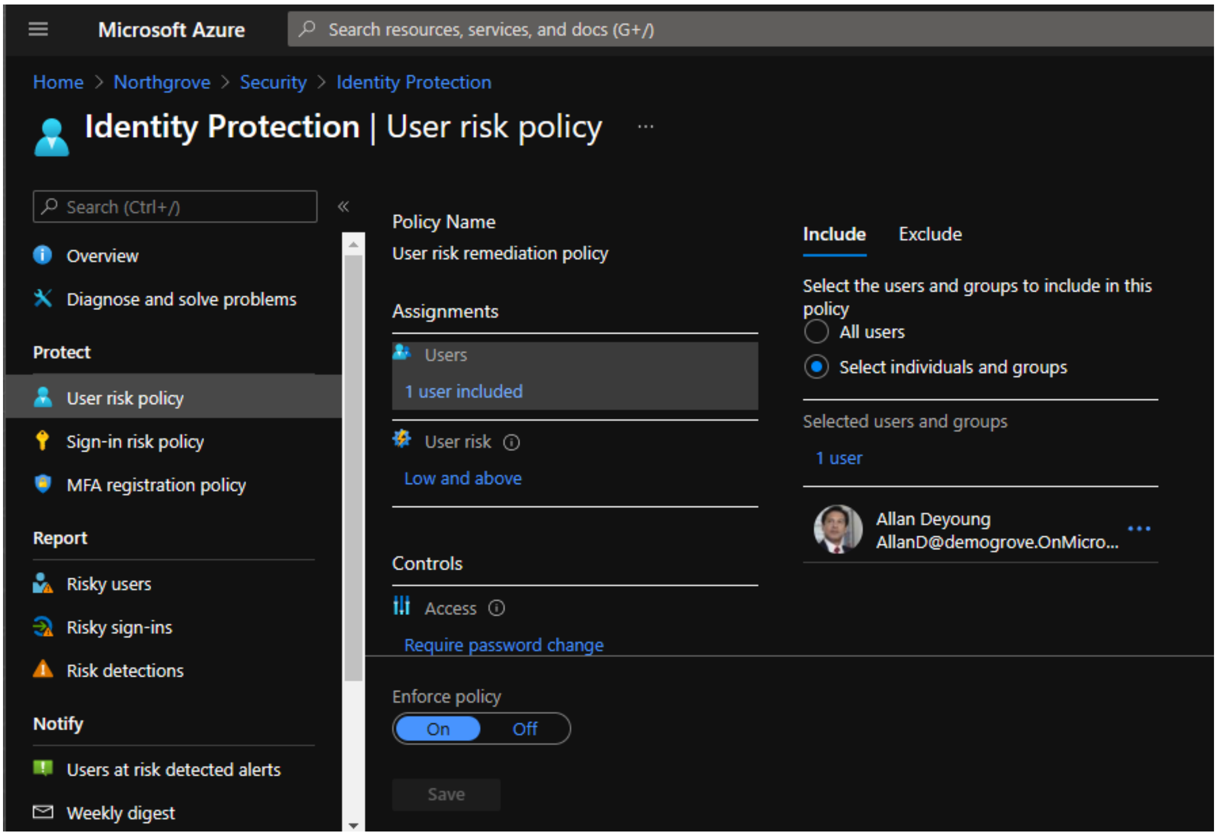
MFA registration policy only affects cloud-based Azure MFA. If you have MFA Server it will not be affected.

Enforce policy
[✓ On] Off

Assignments: All users
Controls: Require Azure AD MFA registration
Enforce policy: On
[save]

This policy will enforce all users in the tenant to register for MFA. An MFA registration wizard will appear during login. The users have the option to postpone the MFA registration up to 14 days.

Create a risky user policy:


Microsoft Azure
Search resources, services, and docs (G+/)
Home > Northgrove > Security > Identity Protection
Identity Protection | User risk policy
Search (Ctrl+/)
Overview
Diagnose and solve problems
Protect
User risk policy
Sign-in risk policy
MFA registration policy
Report
Risky users
Risky sign-ins
Risk detections
Notify
Users at risk detected alerts
Weekly digest
Save

Policy Name
User risk remediation policy

Assignments

Users
1 user included

User risk
Low and above

Controls

Access
Require password change

Enforce policy
On Off

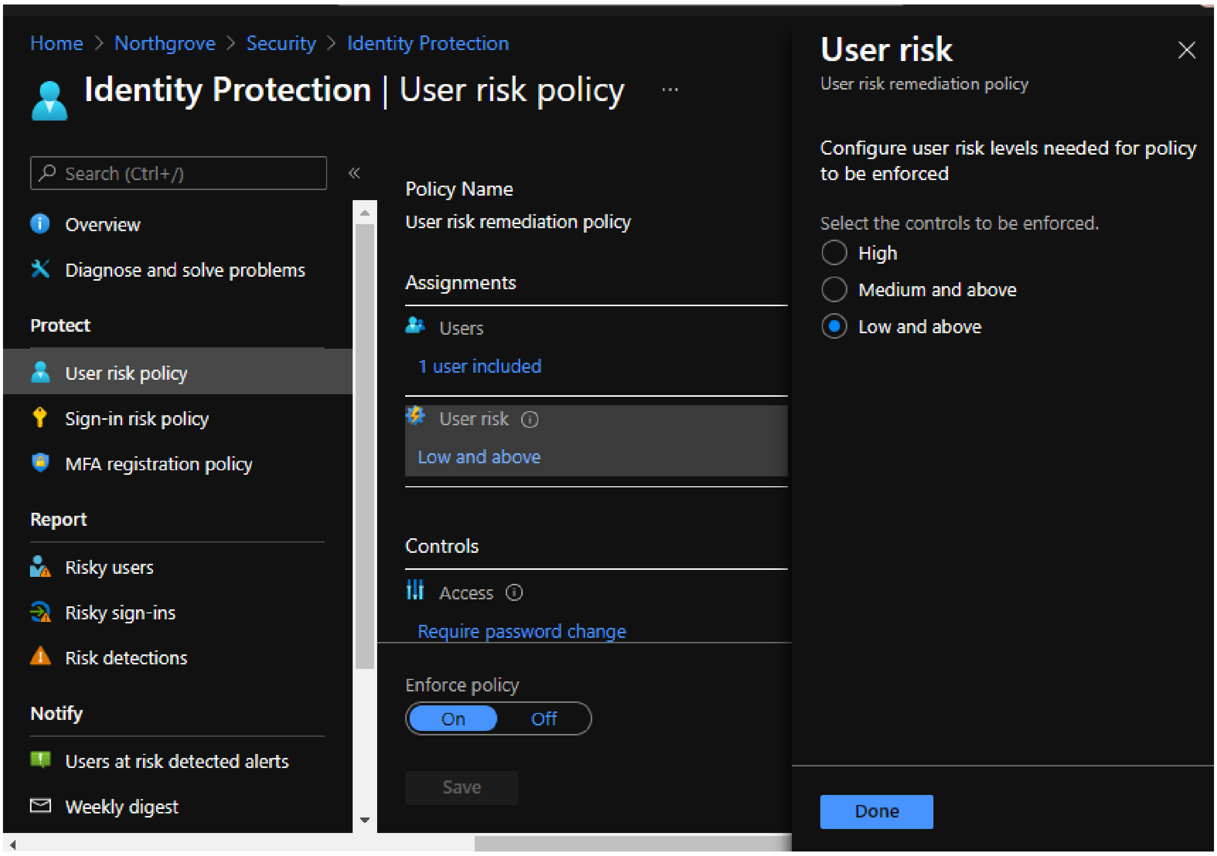
Include Exclude

Select the users and groups to include in this policy
○ All users
● Select individuals and groups

Selected users and groups
1 user

Allan Deyoung
AllanD@demogrove.OnMicro...

Assignments: Assign this policy only to *“testUser1”*



Policy Name
User risk remediation policy

Assignments

Users
1 user included

User risk
Low and above

Controls

Access
Require password change

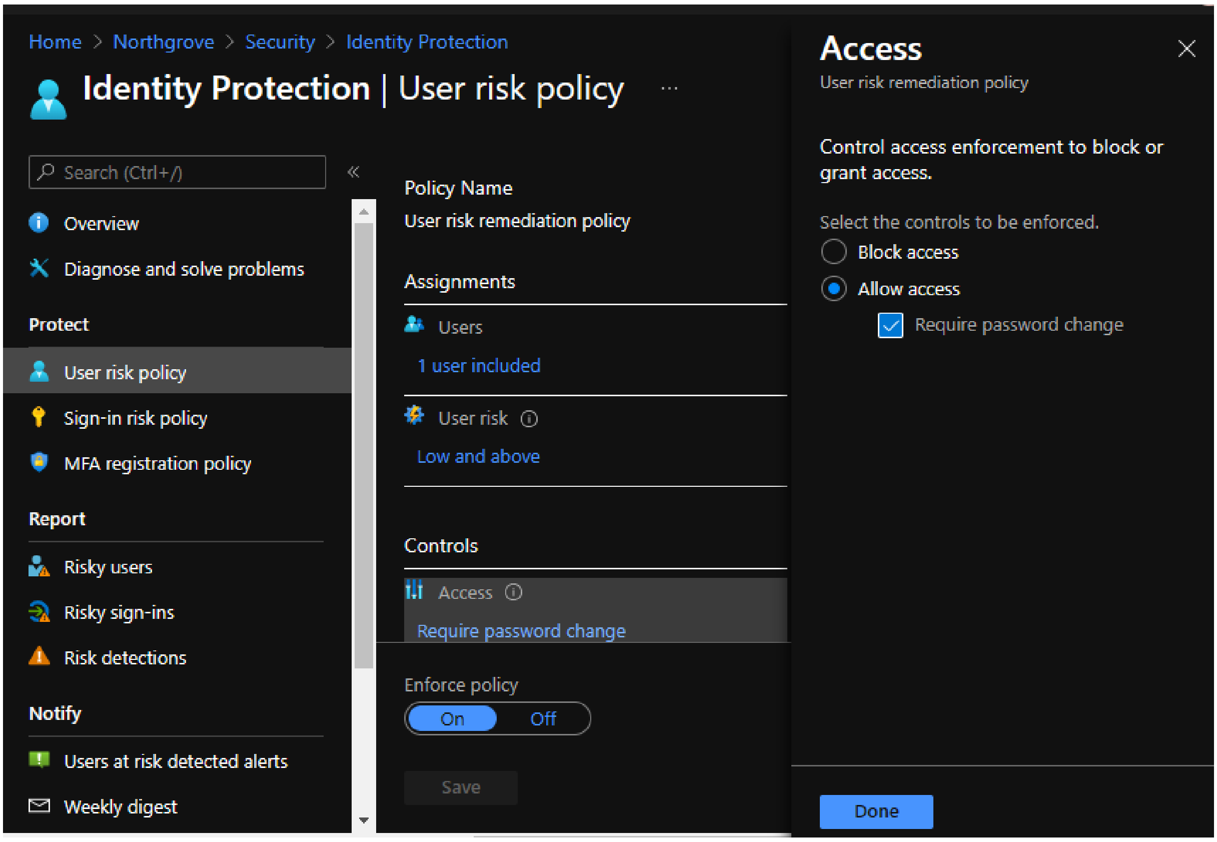
Enforce policy
On Off

User risk
User risk remediation policy

Configure user risk levels needed for policy to be enforced

Select the controls to be enforced.
○ High
○ Medium and above
● Low and above

User risk: choose *“Low and above”*



Identity Protection | User risk policy ...

Policy Name
User risk remediation policy

Assignments

Users
1 user included

User risk ⓘ
Low and above

Controls

Access ⓘ
Require password change

Enforce policy
[✓ On] Off

Access
User risk remediation policy

Control access enforcement to block or grant access.

Select the controls to be enforced.

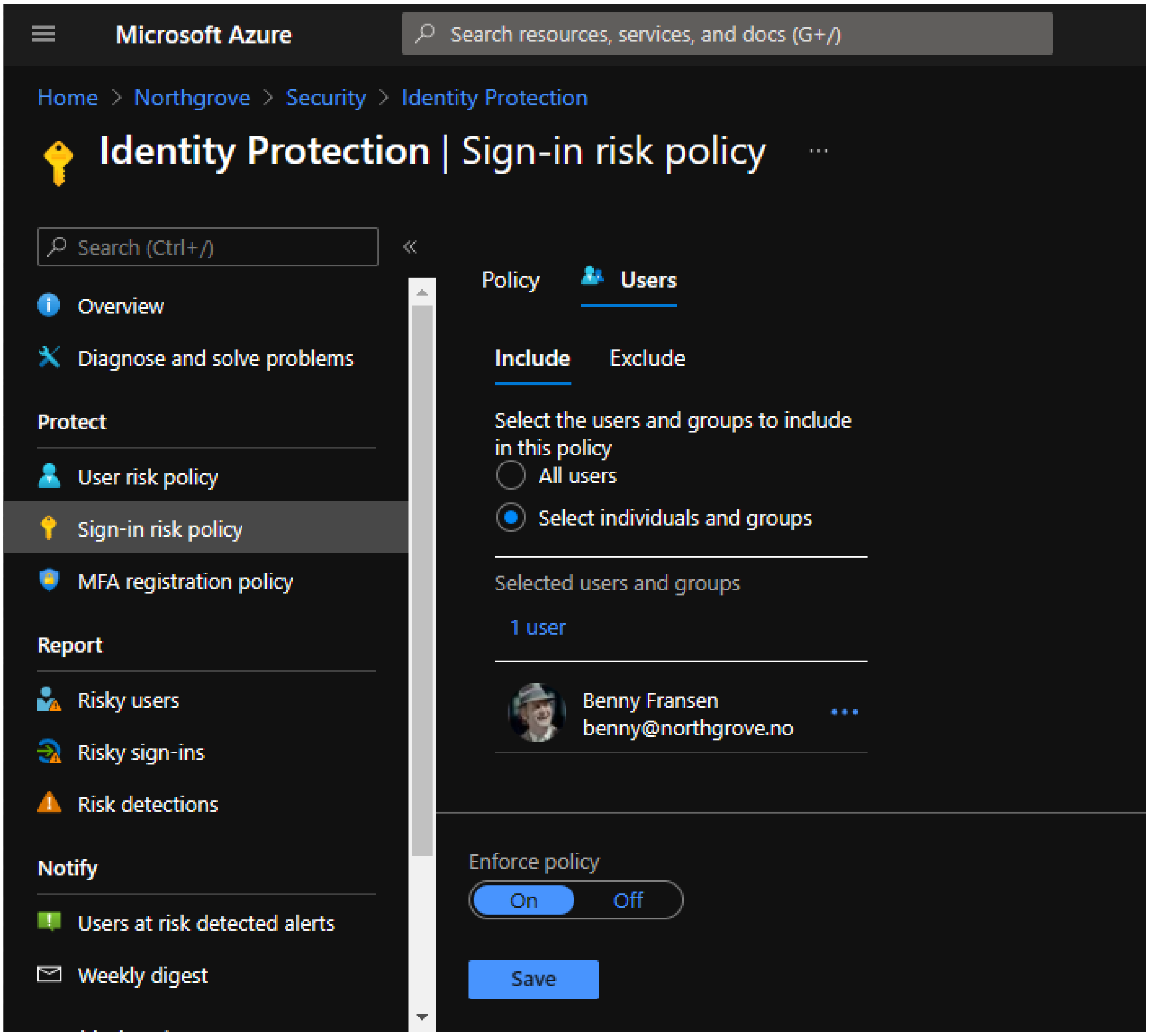
○ Block access

● Allow access

☑ Require password change

Controls: *Allow access + require password change*

Create a risky sing-in policy



Home > Northgrove > Security > Identity Protection

Identity Protection | Sign-in risk policy

Policy | Users

Include | Exclude

Select the users and groups to include in this policy

○ All users

● Select individuals and groups

Selected users and groups

1 user

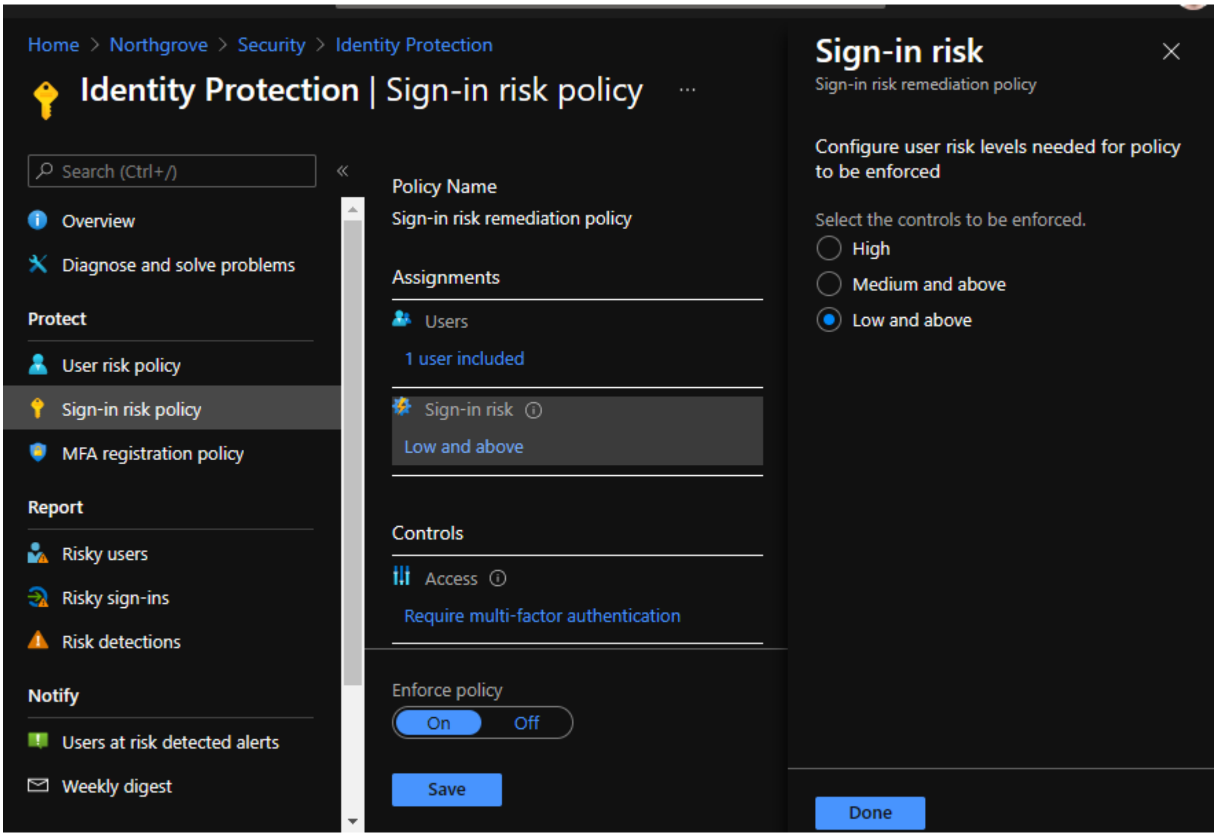
Benny Fransen
benny@northgrove.no

Enforce policy

[✓ On] Off

Save

Assignments: Assign this policy only to *“testUser1” and “testuser2”*



Identity Protection | Sign-in risk policy

Policy Name
Sign-in risk remediation policy

Assignments
Users
1 user included
Sign-in risk
Low and above

Controls
Access
Require multi-factor authentication

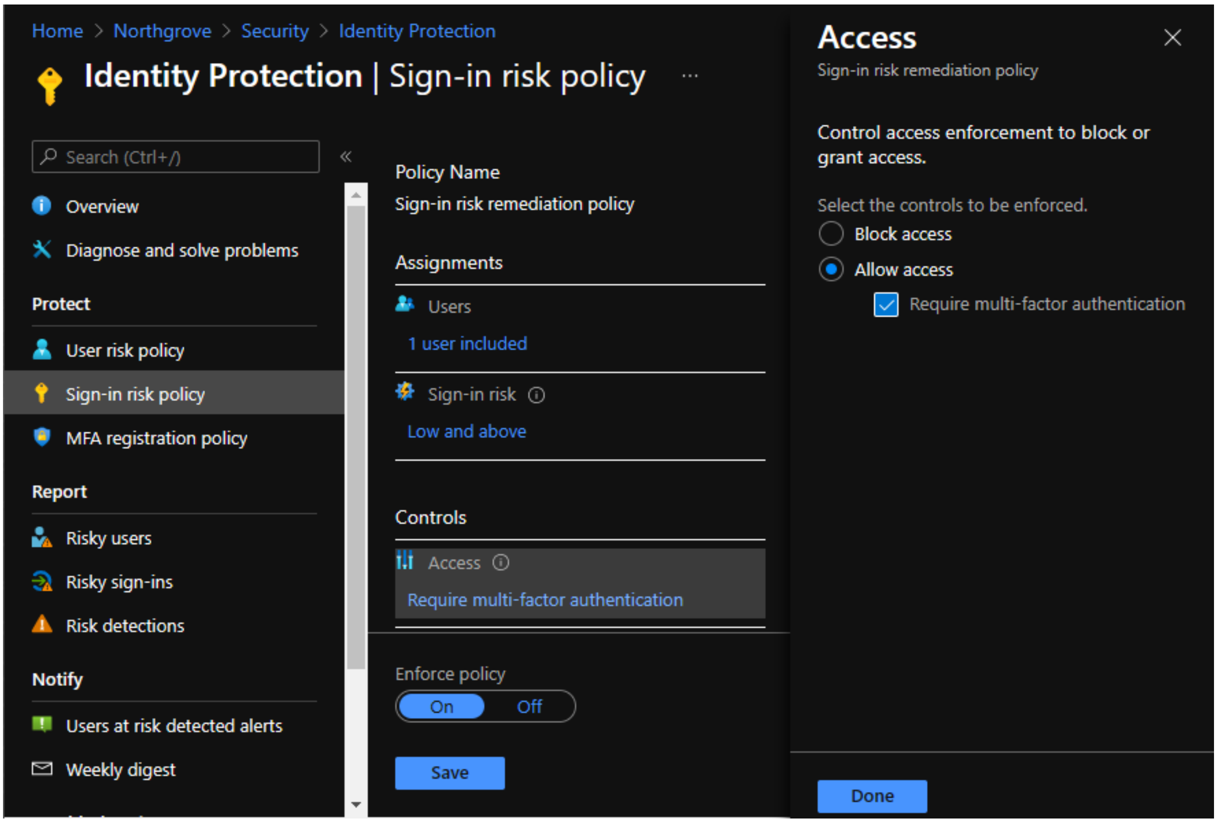
Enforce policy
On | Off

Sign-in risk
Sign-in risk remediation policy

Configure user risk levels needed for policy to be enforced

Select the controls to be enforced.
○ High
○ Medium and above
● Low and above

Sign-in risk: choose *"Low and above"*



Identity Protection | Sign-in risk policy

Policy Name
Sign-in risk remediation policy

Assignments
Users
1 user included
Sign-in risk
Low and above

Controls
Access
Require multi-factor authentication

Enforce policy
On | Off

Access
Sign-in risk remediation policy

Control access enforcement to block or grant access.

Select the controls to be enforced.
○ Block access
● Allow access
☑ Require multi-factor authentication

Controls: Allow access + require multi-factor authentication

RISK BASED CONDITIONAL ACCESS

Configuration of Conditional Access is done in the https://portal.azure.com -> Azure Active Directory -> Security -> Conditional Access

Deep link: Conditional Access - Microsoft Azure

Create a new Conditional Access policy with the following configuration:

Name	Block risky users
Users and groups	Choose your “testuser1”, “testuser2” and “testuser3”
Cloud Apps -> Selected Apps	“Office 365 Exchange online”
Conditions -> User risk	“yes” + “low” and “medium” and “high”
Grant	“Block access”
Enable policy	“On”

This policy will block users with any level of user risk from accessing Office 365 Exchange Online

TEST SCENARIO – IDENTITY PROTECTION

1. Anonymous login detection
   - On your test client, download and install the TOR browser - Tor Project | Download
   - Start the TOR browser, and connect to the TOR network
   - Login with your test account “testuser1” to https://portal.azure.com
   - Sign-in is interrupted with a “risky signin detected”. Cancel the sign-in
     - (if no Suspiciouse activity detected warning sign shows up, interrupt the sign-in, restart the TOR-browser and try sign-in again)
   - Close the TOR browser.
   - Re-open the TOR browser and create a new connection to the TOR network.
   - Login with your test account “testuser2” to https://portal.auzure.com
   - Sign-in is interrupted with a “risky singin detected”. Complete the MFA verification process and complete the login to portal.azure.com

   Expected result:

   - You ***should*** get one sign-in risk entry in Azure AD identity protection console for “testuser1”.
   - You ***should not*** get any sign-in risk entry in the Azure AD identity protection console for “testuser2”.

2. Block risky sign-in with Conditional Access
    - Start the TOR browser, and connect to the TOR network
    - Login with your test account “testuser3” to https://portal.azure.com
    - Sign-in is interrupted with a “risky signin detected”. Cancel the sign-in
        - (if no Suspiciouse activity detected warning sign shows up, interrupt the sign-in, restart the TOR-browser and try sign-in again)
    - Start a regular browser and login to portal.office.com with “testuser3”
    - Try accessing the outlook app in portal.office.com

Expected result:

- User is blocked by Conditional access to access the outlook app

DEFENDER FOR ENDPOINT

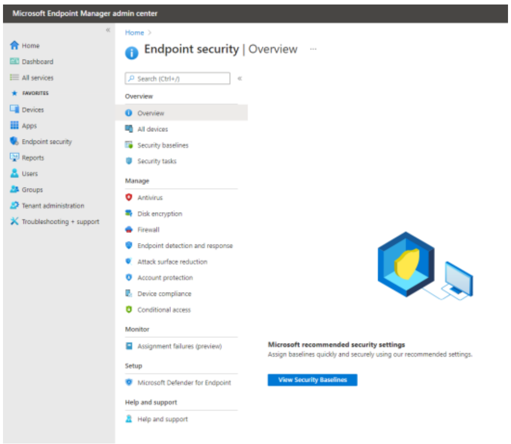
SETUP AND CONFIGURATION

Pre-requisite for testing Defender for Endpoint is that you have a Newly installed Virtual machine or physical machine (Local, ESXI, Hyper-V etc.).

If you don't have a machine you can use the Microsoft Defender Evaluation lab and provision a Windows client there. Look at the end of this document in the Appendix chapter to find a walkthrough.

INTUNE INTEGRATION AND CONFIGURATION POLICIES

Open the Endpoint manager console with the URL – https://endpoint.microsoft.com

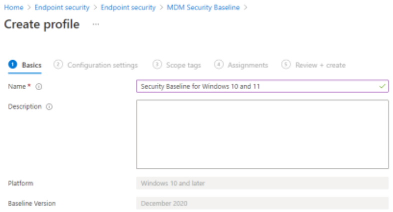


Microsoft recommended security settings

Assign baselines quickly and securely using our recommended settings.

SECURITY BASELINES

1. Navigate to Endpoint Security, click on Security Baselines - > Click Security Baseline for Windows 10 and later .
2. Click on Create profile.
3. Provide a Name and Click Next



Name * : Security Baseline for Windows 10 and 11

Description :

Platform : Windows 10 and later

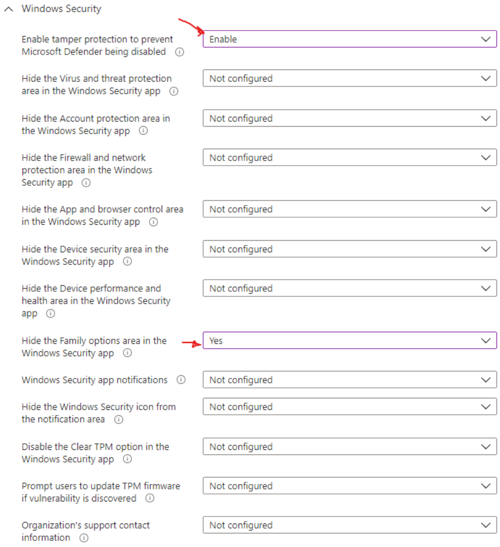
Baseline Version : December 2020

4. Click Next on configuration settings
5. Click Next on Scope tags
6. Click Next on Assignments
7. Click Create.

SECURITY POLICIES

1. Navigate to Endpoint Security, click on Antivirus
2. Click Create Policy
3. In the Dropdown box select Windows 10 and later
4. Windows Security Experience and Click Create
5. Provide a Name and Click Next

6. Make Sure the following is enabled (Tamper Protection and Hide Family Options)



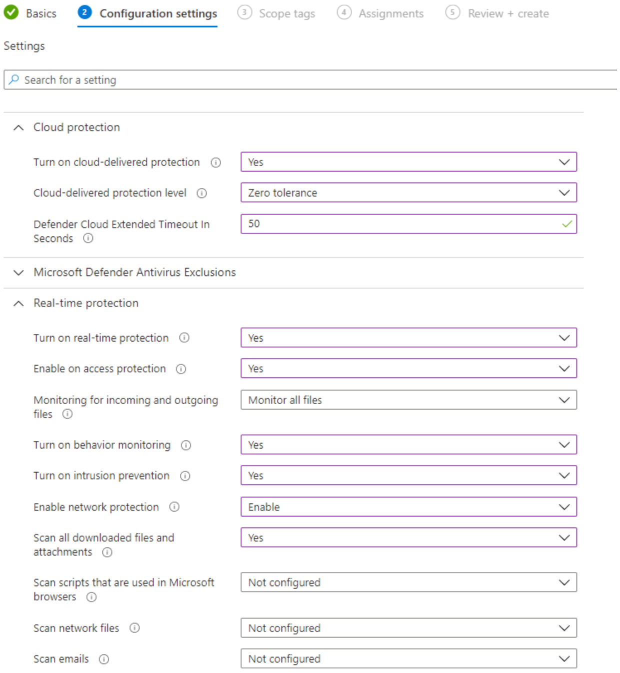
Windows Security

Enable tamper protection to prevent Microsoft Defender being disabled ⓘ	Enable
Hide the Virus and threat protection area in the Windows Security app ⓘ	Not configured
Hide the Account protection area in the Windows Security app ⓘ	Not configured
Hide the Firewall and network protection area in the Windows Security app ⓘ	Not configured
Hide the App and browser control area in the Windows Security app ⓘ	Not configured
Hide the Device security area in the Windows Security app ⓘ	Not configured
Hide the Device performance and health area in the Windows Security app ⓘ	Not configured
Hide the Family options area in the Windows Security app ⓘ	Yes
Windows Security app notifications ⓘ	Not configured
Hide the Windows Security icon from the notification area ⓘ	Not configured
Disable the Clear TPM option in the Windows Security app ⓘ	Not configured
Prompt users to update TPM firmware if vulnerability is discovered ⓘ	Not configured
Organization's support contact information ⓘ	Not configured

7. Click Next on Configuration settings
8. Click Next on Scope tags
9. Click Next on Assignments
10. Click Create

Back in the Console

1. Click Create Policy
2. In the Dropdown box select Windows 10 and later
3. Microsoft Defender Antivirus and Click Create
4. Provide a Name and Click Next
5. Make sure the following is enabled.



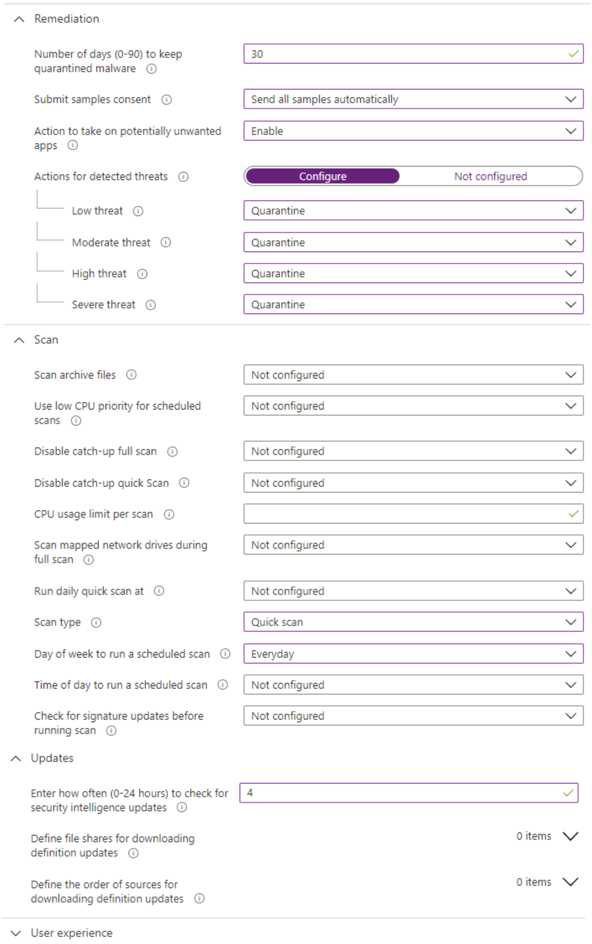
Cloud protection

Turn on cloud-delivered protection ⓘ	Yes
Cloud-delivered protection level ⓘ	Zero tolerance
Defender Cloud Extended Timeout In Seconds ⓘ	50

Microsoft Defender Antivirus Exclusions

Real-time protection

Turn on real-time protection ⓘ	Yes
Enable on access protection ⓘ	Yes
Monitoring for incoming and outgoing files ⓘ	Monitor all files
Turn on behavior monitoring ⓘ	Yes
Turn on intrusion prevention ⓘ	Yes
Enable network protection ⓘ	Enable
Scan all downloaded files and attachments ⓘ	Yes
Scan scripts that are used in Microsoft browsers ⓘ	Not configured
Scan network files ⓘ	Not configured
Scan emails ⓘ	Not configured



Remediation

Number of days (0-90) to keep quarantined malware	30
Submit samples consent	Send all samples automatically
Action to take on potentially unwanted apps	Enable
Actions for detected threats	Configure
Low threat	Quarantine
Moderate threat	Quarantine
High threat	Quarantine
Severe threat	Quarantine

Scan

Scan archive files	Not configured
Use low CPU priority for scheduled scans	Not configured
Disable catch-up full scan	Not configured
Disable catch-up quick Scan	Not configured
CPU usage limit per scan	
Scan mapped network drives during full scan	Not configured
Run daily quick scan at	Not configured
Scan type	Quick scan
Day of week to run a scheduled scan	Everyday
Time of day to run a scheduled scan	Not configured
Check for signature updates before running scan	Not configured

Updates

Enter how often (0-24 hours) to check for security intelligence updates	4
Define file shares for downloading definition updates	0 items
Define the order of sources for downloading definition updates	0 items

User experience

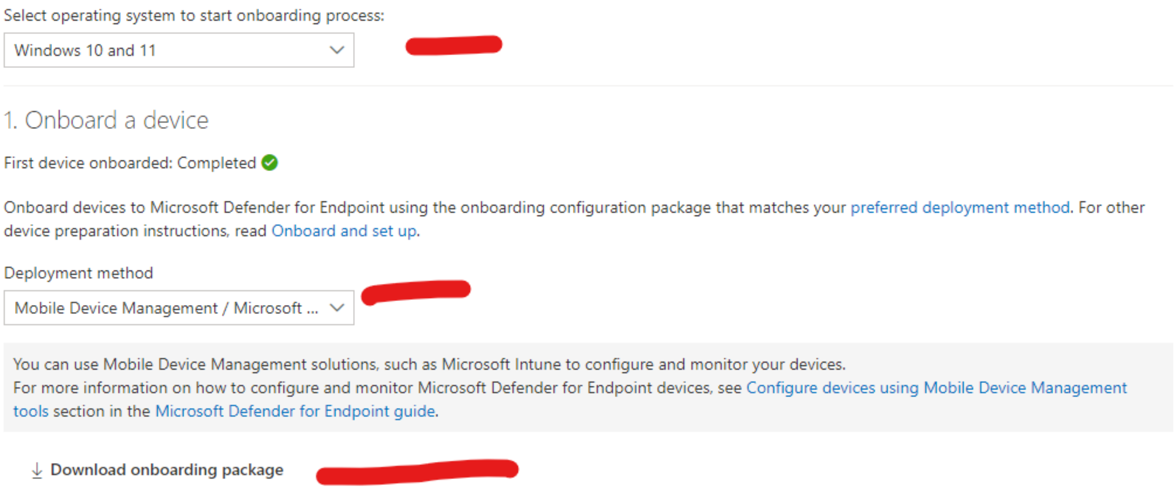
6. Click Next on Configuration settings
7. Click Next on Scope tags
8. Click Next on Assignments
9. Click Create

ENDPOINT DETECTION AND RESPONSE

Before starting on this policy we may need to download a config file from Defender For Endpoint.

In Security.microsoft.com – Click on Settings -> Endpoints -> Onboarding.

Select the following to download the config file. Extract the Zip file.



Select operating system to start onboarding process:

Windows 10 and 11

1. Onboard a device

First device onboarded: Completed ✓

Onboard devices to Microsoft Defender for Endpoint using the onboarding configuration package that matches your preferred deployment method. For other device preparation instructions, read Onboard and set up.

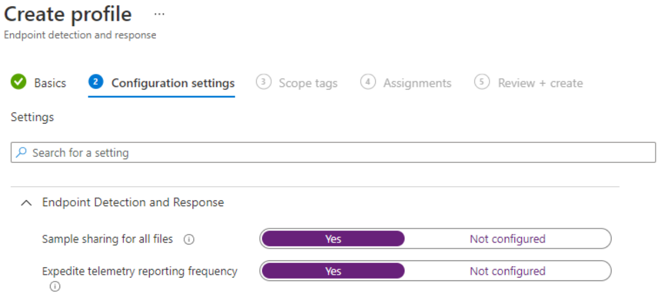
Deployment method

Mobile Device Management / Microsoft ...

You can use Mobile Device Management solutions, such as Microsoft Intune to configure and monitor your devices.
For more information on how to configure and monitor Microsoft Defender for Endpoint devices, see Configure devices using Mobile Device Management tools section in the Microsoft Defender for Endpoint guide.

↓ Download onboarding package

1. Navigate to Endpoint Security, click on Endpoint Detection and Response
2. Click Create Policy
3. In the Dropdown box select Windows 10 and later
4. Select Endpoint Detection and Response Click Create
5. Provide a Name and Click Next
6. Select the following and click Next



Create profile ...

Endpoint detection and response

Settings

Endpoint Detection and Response

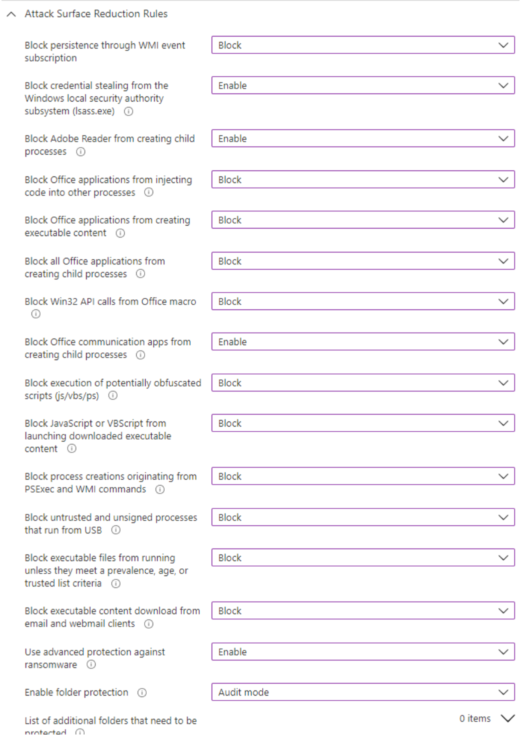
Sample sharing for all files: Yes [✓] | Not configured

Expedite telemetry reporting frequency: Yes [✓] | Not configured

7.
8. Click Next on Configuration settings
9. Click Next on Scope tags
10. Click Next on Assignments
11. Click Create

ATTACK SURFACE REDUCTION

1. Navigate to Endpoint Security, click on Attack Surface Reduction
2. Click Create Policy
3. In the Dropdown box select Windows 10 and later
4. Select Attack Surface Reduction Click Create
5. Provide a Name and Click Next
6. Select the following and click Next



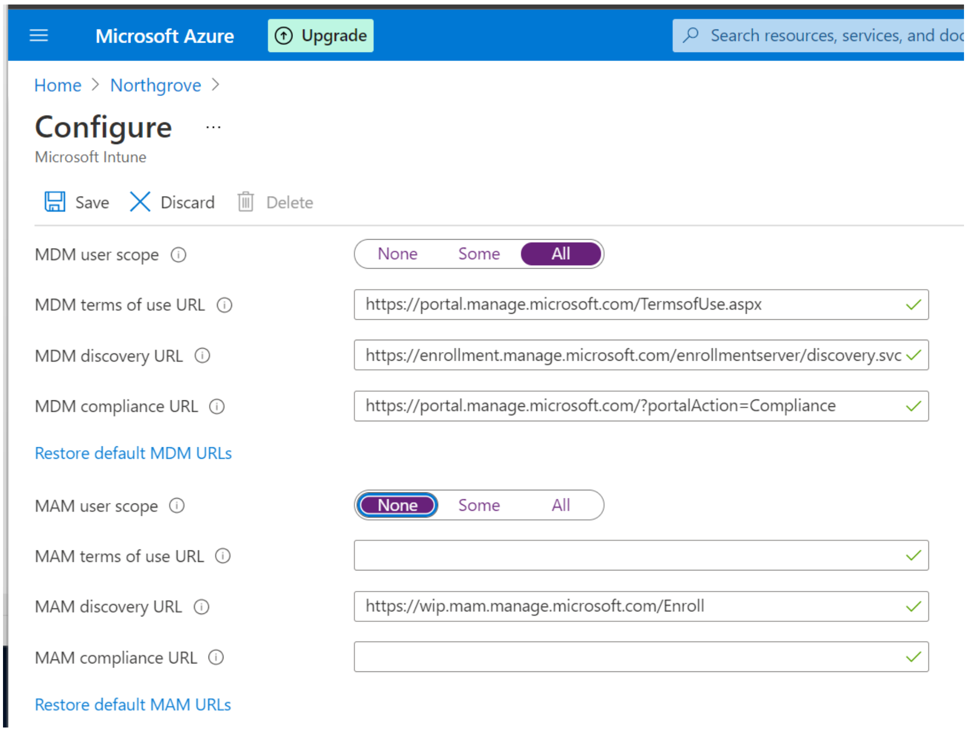
Attack Surface Reduction Rules

Block persistence through WMI event subscription	Block
Block credential stealing from the Windows local security authority subsystem (lsass.exe)	Enable
Block Adobe Reader from creating child processes	Enable
Block Office applications from injecting code into other processes	Block
Block Office applications from creating executable content	Block
Block all Office applications from creating child processes	Block
Block Win32 API calls from Office macro	Block
Block Office communication apps from creating child processes	Enable
Block execution of potentially obfuscated scripts (js/vbs/ps)	Block
Block JavaScript or VBScript from launching downloaded executable content	Block
Block process creations originating from PSExec and WMI commands	Block
Block untrusted and unsigned processes that run from USB	Block
Block executable files from running unless they meet a prevalence, age, or trusted list criteria	Block
Block executable content download from email and webmail clients	Block
Use advanced protection against ransomware	Enable
Enable folder protection	Audit mode
List of additional folders that need to be protected	0 items

7. Click Next on Configuration settings
8. Click Next on Scope tags
9. Click Next on Assignments
10. Click Create

ENROLL YOUR TESTMACHINE TO INTUNE

Configure autoenrollment in Azure AD: Azure Active Directory > Mobility (MDM and MAM) > Microsoft Intune



Configure ···

Microsoft Intune

MDM user scope: None Some [✓ All]

MDM terms of use URL: https://portal.manage.microsoft.com/TermsofUse.aspx ✓

MDM discovery URL: https://enrollment.manage.microsoft.com/enrollmentserver/discovery.svc ✓

MDM compliance URL: https://portal.manage.microsoft.com/?portalAction=Compliance ✓

Restore default MDM URLs

MAM user scope: [✓ None] Some All

MAM terms of use URL: ✓

MAM discovery URL: https://wip.mam.manage.microsoft.com/Enroll ✓

MAM compliance URL: ✓

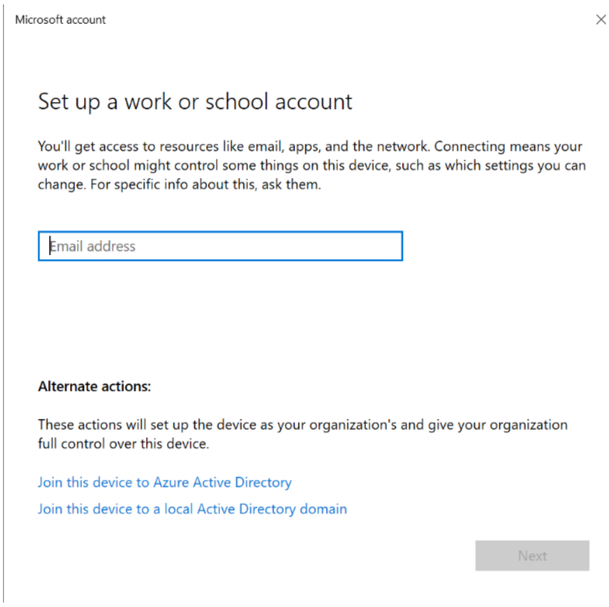
Restore default MAM URLs

Set ”MDM user scope” to all. Click Save

Login to your testmachine with “Administrator1” and the provided password.

Go to: Start -> Settings -> Accounts -> Access Work or School

Click “Connect”



Set up a work or school account

You'll get access to resources like email, apps, and the network. Connecting means your work or school might control some things on this device, such as which settings you can change. For specific info about this, ask them.

Alternate actions:

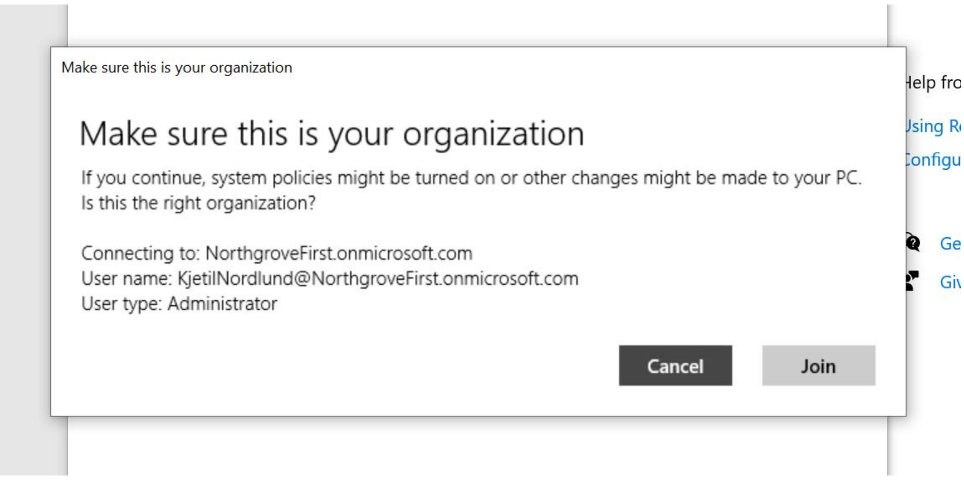
These actions will set up the device as your organization's and give your organization full control over this device.

Join this device to Azure Active Directory

Join this device to a local Active Directory domain

make sure to click on ”join this device to Azure Active Directory”

Enter the email address to your first Azure AD account, and login



Make sure this is your organization

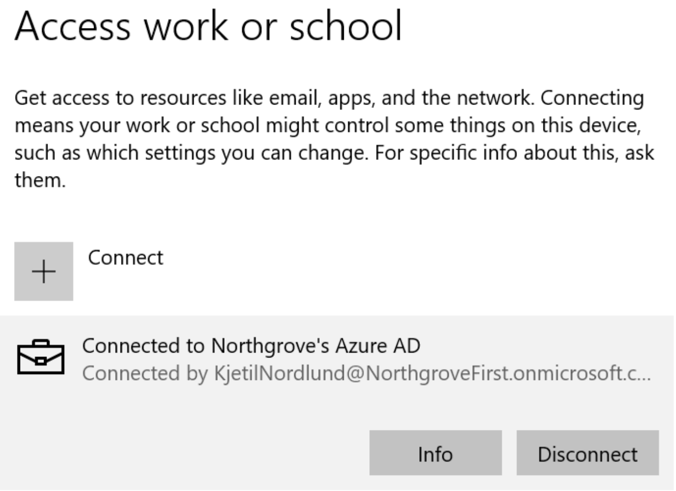
Make sure this is your organization

If you continue, system policies might be turned on or other changes might be made to your PC. Is this the right organization?

Connecting to: NorthgroveFirst.onmicrosoft.com
User name: KjetilNordlund@NorthgroveFirst.onmicrosoft.com
User type: Administrator

Click join

Click done



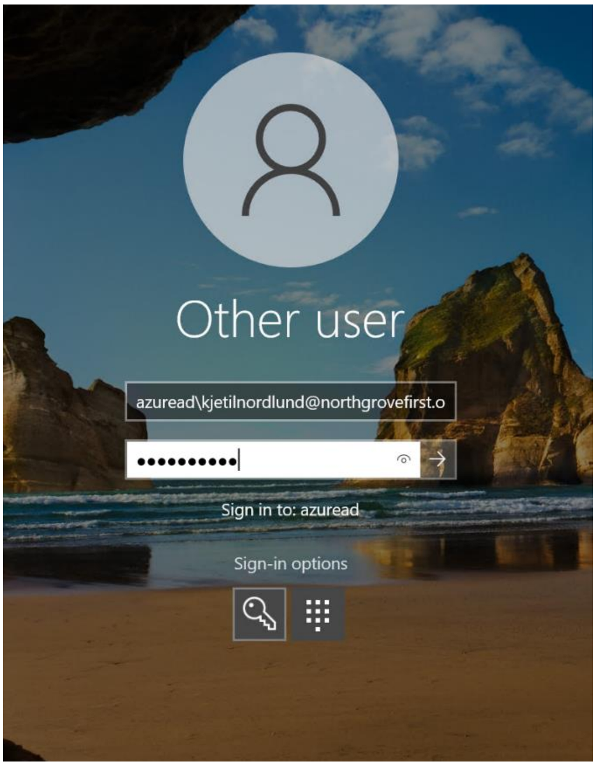
Access work or school

Get access to resources like email, apps, and the network. Connecting means your work or school might control some things on this device, such as which settings you can change. For specific info about this, ask them.

Connected to Northgrove's Azure AD
Connected by KjetilNordlund@NorthgroveFirst.onmicrosoft.c...

Verify that your computer is connected to your environment (both Azure AD and Intune)

Restart your computer



Other user

azuread\kjetilnordlund@northgrovefirst.o

Sign in to: azuread

Sign-in options

Login to the computer with your first Azure AD account
To be able to login you must type **azuread** in front of your email address

Wait for intune configuration profiles to be delivered

TEST SCENARIO

[Enable attack surface reduction rules | Microsoft Docs]

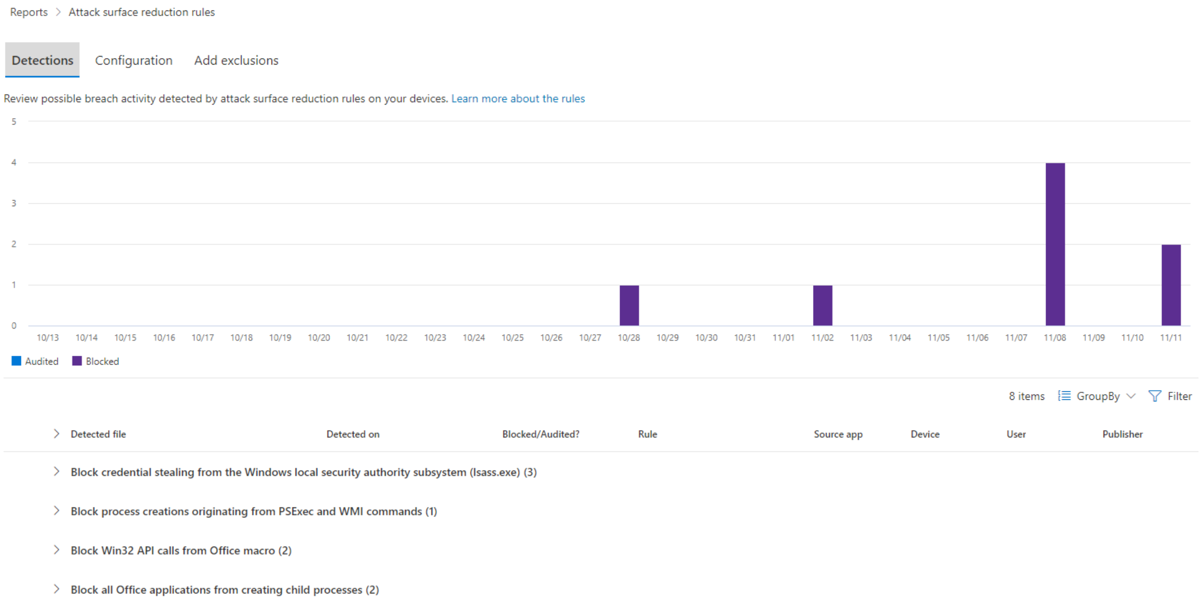
[https://demo.wd.microsoft.com/] - contains several test scenarios for Defender and ASR

https://aka.ms/ioavtest

Procdump. - [Sysinternals Utilities - Windows Sysinternals | Microsoft Docs]
(cmd.exe and run - procdump lsass.exe)

Mimikatz or similar tools.

Review the report for detections and what's blocked in security.microsoft.com console for ASR rules.



Review possible breach activity detected by attack surface reduction rules on your devices. Learn more about the rules

Detected file	Detected on	Blocked/Audited?	Rule	Source app	Device	User	Publisher
Block credential stealing from the Windows local security authority subsystem (lsass.exe) (3)							
Block process creations originating from PSExec and WMI commands (1)							
Block Win32 API calls from Office macro (2)							
Block all Office applications from creating child processes (2)							

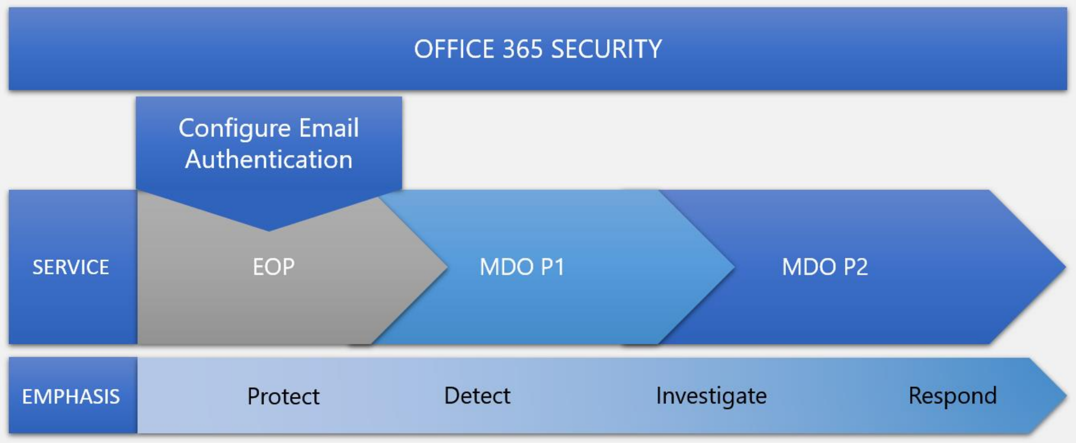
DEFENDER FOR OFFICE 365

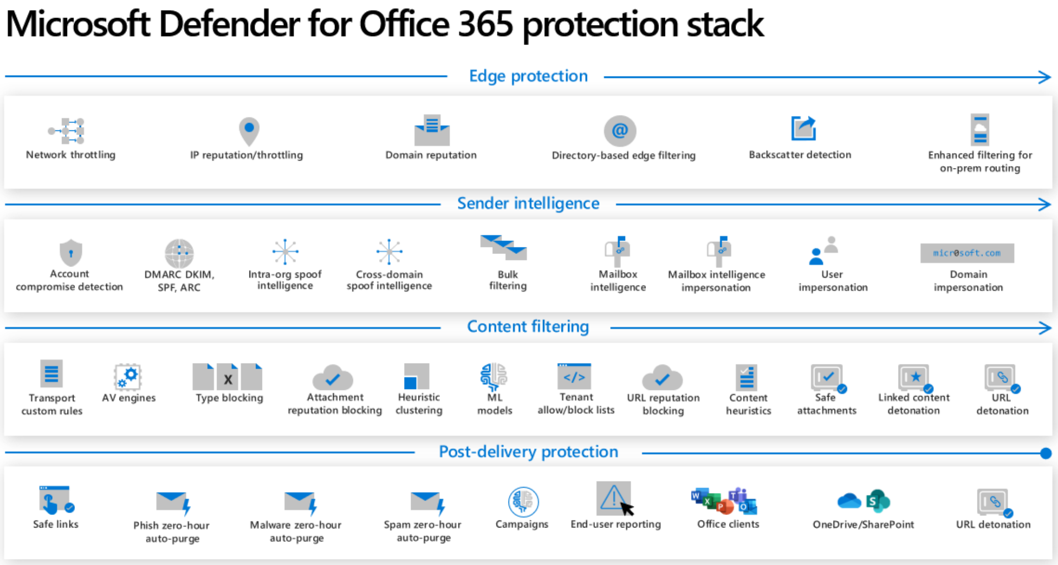
WHAT IS DEFENDER FOR OFFICE 365 SECURITY

Every Office 365 subscription comes with security capabilities. The goals and actions that you can take depend on the focus of these different subscriptions. In Office 365 security, there are three main security services (or products) tied to your subscription type:

1. Exchange Online Protection (EOP)
2. Microsoft Defender for Office 365 Plan 1 (Defender for Office P1)
3. Microsoft Defender for Office 365 Plan 2 (Defender for Office P2)

Microsoft Defender for Office 365




Microsoft Defender for Office 365 protection stack

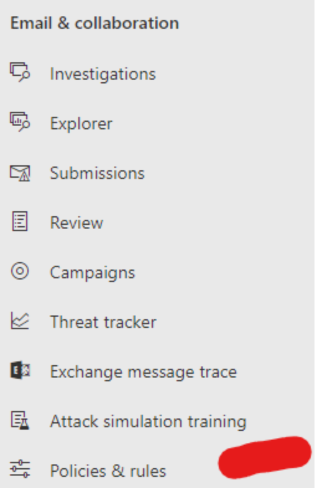
SETUP AND CONFIGURATION

Review architecture requirements

Security policies can be configured as,

1. Assign preset security policies automatically Preset Security Policy **standard** or **strict.**
   If no need to customize the setup, this will keep the customer at recommended settings, however most customers need some kind of customization.
2. Configure baseline protection manually Custom
   - Anti-malware protection in EOP
   - Anti-phishing protection in EOP and Defender for Office 365
   - Anti-spam protection in EOP
   - Protection from malicious URLs and files
     - Safe Links
     - Safe Attachments

In Security.microsoft.com console navigate to Policies & Rules in the Email and Collaboration.



Email & collaboration

Investigations

Explorer

Submissions

Review

Campaigns

Threat tracker

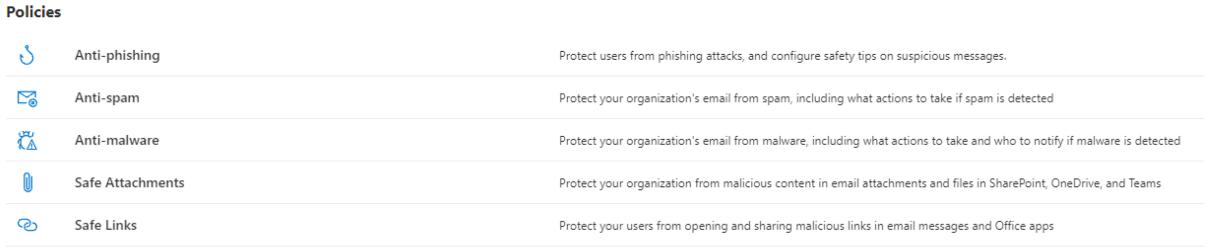
Exchange message trace

Attack simulation training

Policies & rules

Click on **Threat policies**

We are going to focus on **Anti-phishing** policies **Safe Attachments**, **Safe Links**.



Policies

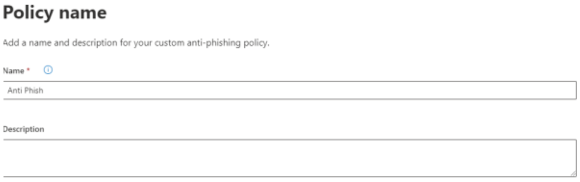
Anti-phishing	Protect users from phishing attacks, and configure safety tips on suspicious messages.
Anti-spam	Protect your organization's email from spam, including what actions to take if spam is detected
Anti-malware	Protect your organization's email from malware, including what actions to take and who to notify if malware is detected
Safe Attachments	Protect your organization from malicious content in email attachments and files in SharePoint, OneDrive, and Teams
Safe Links	Protect your users from opening and sharing malicious links in email messages and Office apps

ANTI-PHISHING

Refer to the recommended settings to determine Default, Standard og Strict settings
anti-phishing policies Default, Standard, Strict

1. Click on Anti-phishing and + Create create a new Policy

2. Give the policy a Name



Policy name

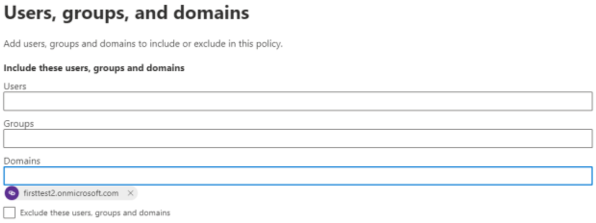
Add a name and description for your custom anti-phishing policy.

Name *

Anti Phish

Description

3. Add your tenant domain(s)



Users, groups, and domains

Add users, groups and domains to include or exclude in this policy.

Include these users, groups and domains

Users

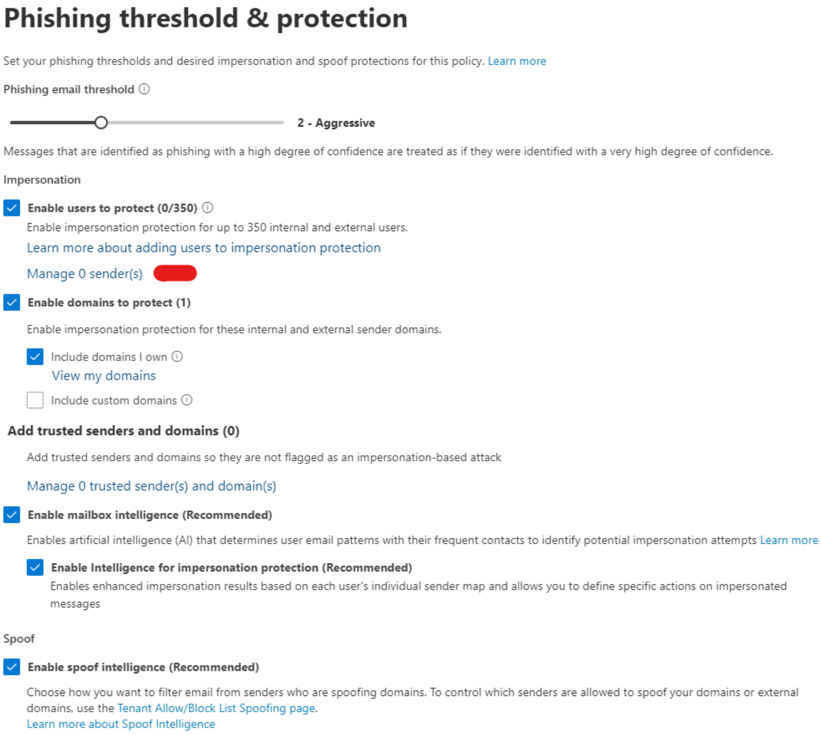
Groups

Domains

firsttest2.onmicrosoft.com ×

□ Exclude these users, groups and domains

4. Move the Phishing email threshold slider to 2-Aggressive



Phishing threshold & protection

Set your phishing thresholds and desired impersonation and spoof protections for this policy. Learn more

Phishing email threshold ⓘ

2 - Aggressive

Messages that are identified as phishing with a high degree of confidence are treated as if they were identified with a very high degree of confidence.

Impersonation

☑ **Enable users to protect (0/350)** ⓘ

Enable impersonation protection for up to 350 internal and external users.

Learn more about adding users to impersonation protection

Manage 0 sender(s)

☑ **Enable domains to protect (1)**

Enable impersonation protection for these internal and external sender domains.

☑ Include domains I own ⓘ

View my domains

□ Include custom domains ⓘ

Add trusted senders and domains (0)

Add trusted senders and domains so they are not flagged as an impersonation-based attack

Manage 0 trusted sender(s) and domain(s)

☑ **Enable mailbox intelligence (Recommended)**

Enables artificial intelligence (AI) that determines user email patterns with their frequent contacts to identify potential impersonation attempts Learn more

☑ **Enable Intelligence for impersonation protection (Recommended)**

Enables enhanced impersonation results based on each user's individual sender map and allows you to define specific actions on impersonated messages

Spoof

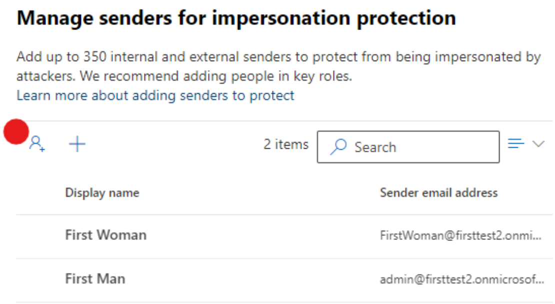
☑ **Enable spoof intelligence (Recommended)**

Choose how you want to filter email from senders who are spoofing domains. To control which senders are allowed to spoof your domains or external domains, use the Tenant Allow/Block List Spoofing page.

Learn more about Spoof Intelligence

5.

6. Click on manage 0 sende(s)



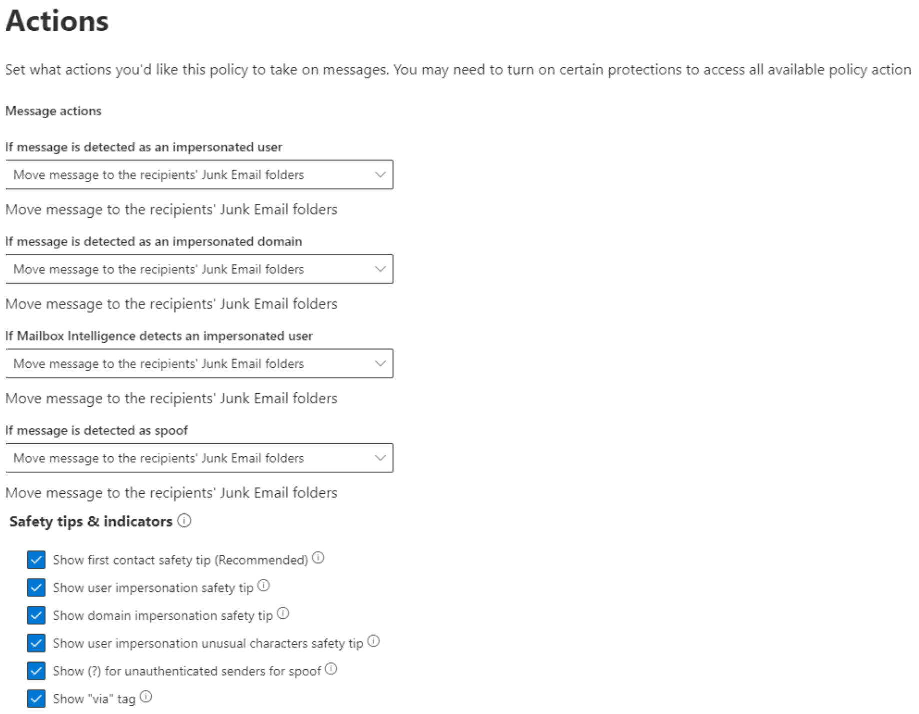
Manage senders for impersonation protection

Add up to 350 internal and external senders to protect from being impersonated by attackers. We recommend adding people in key roles.

Learn more about adding senders to protect

Display name	Sender email address
First Woman	FirstWoman@firsttest2.onmi...
First Man	admin@firsttest2.onmicrosof...

7.



Actions

Set what actions you'd like this policy to take on messages. You may need to turn on certain protections to access all available policy action

Message actions

If message is detected as an impersonated user

Move message to the recipients' Junk Email folders

Move message to the recipients' Junk Email folders

If message is detected as an impersonated domain

Move message to the recipients' Junk Email folders

Move message to the recipients' Junk Email folders

If Mailbox Intelligence detects an impersonated user

Move message to the recipients' Junk Email folders

Move message to the recipients' Junk Email folders

If message is detected as spoof

Move message to the recipients' Junk Email folders

Move message to the recipients' Junk Email folders

Safety tips & indicators ⓘ

☑ Show first contact safety tip (Recommended) ⓘ
☑ Show user impersonation safety tip ⓘ
☑ Show domain impersonation safety tip ⓘ
☑ Show user impersonation unusual characters safety tip ⓘ
☑ Show (?) for unauthenticated senders for spoof ⓘ
☑ Show "via" tag ⓘ

8.

TEST SCENARIO

Create a new or use and existing Email account for Impersonation test.

Email address need impersonate a user in your tenant.
Example: - User1@kents-events.com - User1@firsttest2.onmicrosoft.com will trigger the impersonation protection settings in Anti phishing policy

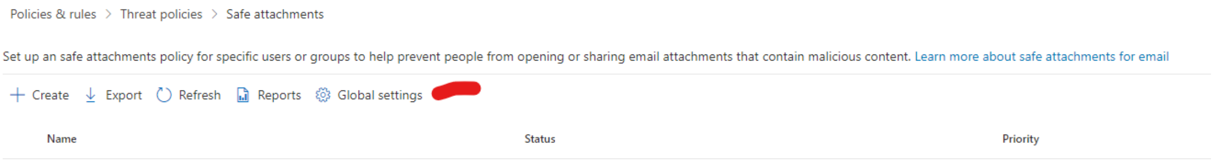
SAFE ATTACHMENTS

Safe attachments is extra layer of protection known as Sandbox detonation.
For reference to Default, Standard or strict setting open the Safe Attachments doc.

In Threat policies, click on Safe Attachments.

GLOBAL SETTINGS – SAFE ATTACHMENTS

Open Global Settings. (Global means tenant wide settings)

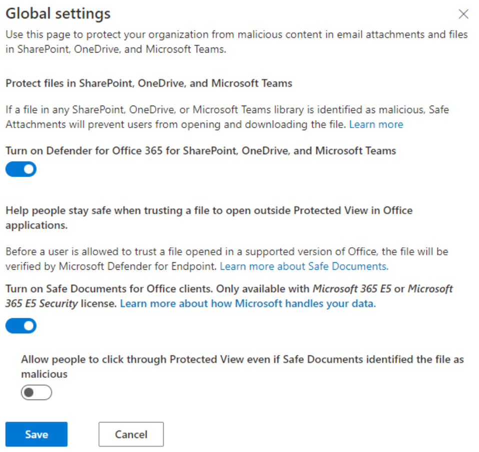


Policies & rules > Threat policies > Safe attachments

Set up an safe attachments policy for specific users or groups to help prevent people from opening or sharing email attachments that contain malicious content. Learn more about safe attachments for email

Activate Global Settings for:

- Defender for O365, SharePoint, OneDrive, and Microsoft Teams
- Safe Documents for Office Client.



Global settings

Use this page to protect your organization from malicious content in email attachments and files in SharePoint, OneDrive, and Microsoft Teams.

Protect files in SharePoint, OneDrive, and Microsoft Teams

If a file in any SharePoint, OneDrive, or Microsoft Teams library is identified as malicious, Safe Attachments will prevent users from opening and downloading the file. Learn more

Turn on Defender for Office 365 for SharePoint, OneDrive, and Microsoft Teams

●

Help people stay safe when trusting a file to open outside Protected View in Office applications.

Before a user is allowed to trust a file opened in a supported version of Office, the file will be verified by Microsoft Defender for Endpoint. Learn more about Safe Documents.

Turn on Safe Documents for Office clients. Only available with *Microsoft 365 E5 or Microsoft 365 E5 Security* license. Learn more about how Microsoft handles your data.

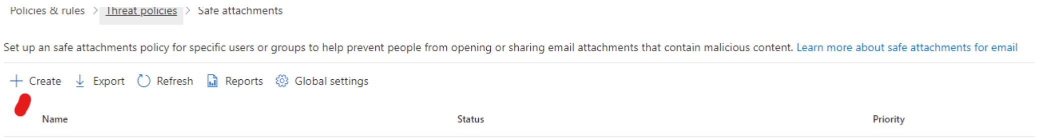
●

Allow people to click through Protected View even if Safe Documents identified the file as malicious

○

POLICY SETTINGS - SAFE ATTACHMENTS

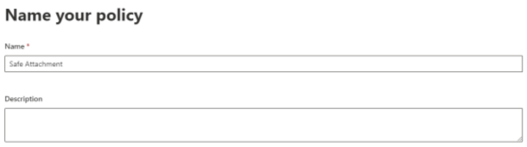
1. Create a new Policy



Policies & rules > Threat policies > Safe attachments

Set up an safe attachments policy for specific users or groups to help prevent people from opening or sharing email attachments that contain malicious content. Learn more about safe attachments for email

2. Give the Policy a Name and a Description

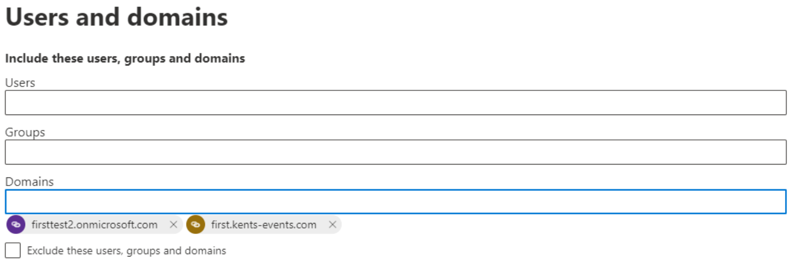


Name your policy

Name *: Safe Attachment

Description:

3. Add your domain(s) to the policy



Users and domains

Include these users, groups and domains

Users

Groups

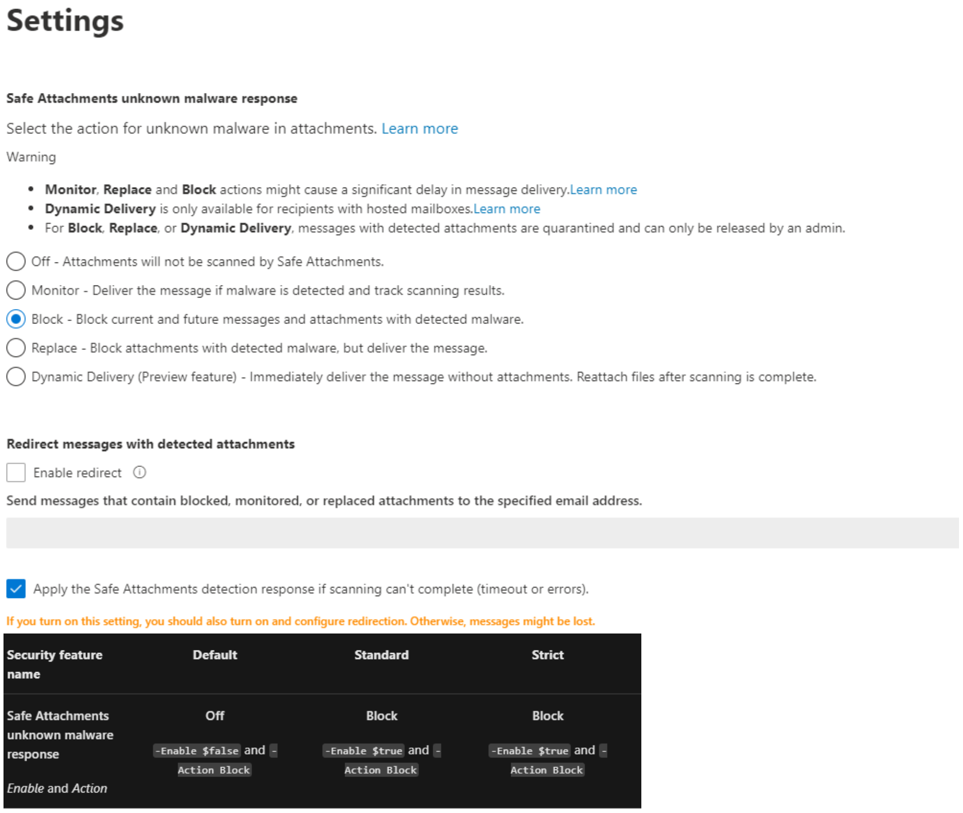
Domains

firsttest2.onmicrosoft.com × first.kents-events.com ×

□ Exclude these users, groups and domains

Add exclusions if you need to Bypass the Sandbox for any reason.

4. Configure the behavior of the Sandbox.



Settings

Safe Attachments unknown malware response

Select the action for unknown malware in attachments. Learn more

Warning

- **Monitor**, **Replace** and **Block** actions might cause a significant delay in message delivery.Learn more
- **Dynamic Delivery** is only available for recipients with hosted mailboxes.Learn more
- For **Block**, **Replace**, or **Dynamic Delivery**, messages with detected attachments are quarantined and can only be released by an admin.

○ Off - Attachments will not be scanned by Safe Attachments.

○ Monitor - Deliver the message if malware is detected and track scanning results.

● Block - Block current and future messages and attachments with detected malware.

○ Replace - Block attachments with detected malware, but deliver the message.

○ Dynamic Delivery (Preview feature) - Immediately deliver the message without attachments. Reattach files after scanning is complete.

Redirect messages with detected attachments

□ Enable redirect ⓘ

Send messages that contain blocked, monitored, or replaced attachments to the specified email address.

☑ Apply the Safe Attachments detection response if scanning can't complete (timeout or errors).

If you turn on this setting, you should also turn on and configure redirection. Otherwise, messages might be lost.

Security feature name	Default	Standard	Strict
Safe Attachments unknown malware response *Enable* and *Action*	Off `-Enable $false` and `-Action Block`	Block `-Enable $true` and `-Action Block`	Block `-Enable $true` and `-Action Block`

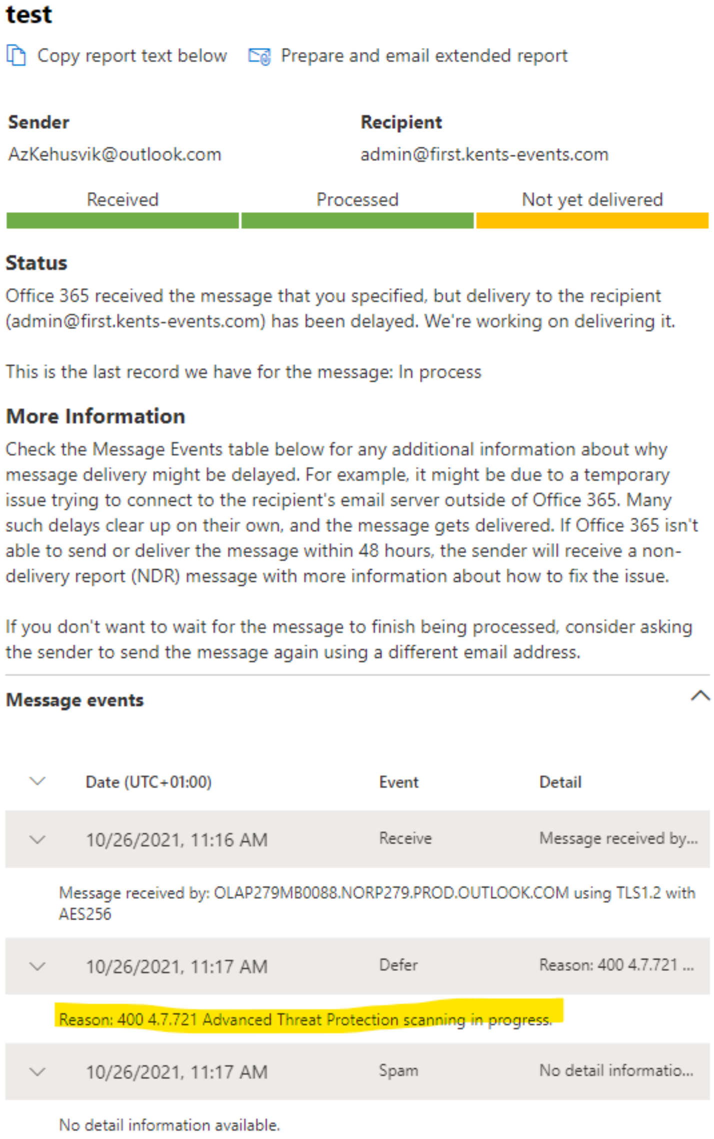
TEST SCENARIO

For Sandbox to be triggered we need to send an email to a protected user with an attachment that is not yet scanned by any Defender service.
From a Machine with a Excluded folder or a machine with EPP that is not Defender.

1. Download a test file with the number you are assigned from M365DefenderTraining/Sonar at Sonar · northgrove/M365DefenderTraining (github.com) (eks : first17.doc if you are assigned nr 17)

2. Send the testfile as Attachment to an email address on your tenant.

3. From Exchange Message Trace, search for the email and look for the following : Reason: 400 4.7.721 Advanced Threat Protection scanning in progress.



test

Sender
AzKehusvik@outlook.com

Recipient
admin@first.kents-events.com

Status

Office 365 received the message that you specified, but delivery to the recipient (admin@first.kents-events.com) has been delayed. We're working on delivering it.

This is the last record we have for the message: In process

More Information

Check the Message Events table below for any additional information about why message delivery might be delayed. For example, it might be due to a temporary issue trying to connect to the recipient's email server outside of Office 365. Many such delays clear up on their own, and the message gets delivered. If Office 365 isn't able to send or deliver the message within 48 hours, the sender will receive a non-delivery report (NDR) message with more information about how to fix the issue.

If you don't want to wait for the message to finish being processed, consider asking the sender to send the message again using a different email address.

Message events

Date (UTC+01:00)	Event	Detail
10/26/2021, 11:16 AM	Receive	Message received by...
10/26/2021, 11:17 AM	Defer	Reason: 400 4.7.721 ...
10/26/2021, 11:17 AM	Spam	No detail informatio...

Message received by: OLAP279MB0088.NORP279.PROD.OUTLOOK.COM using TLS1.2 with AES256

Reason: 400 4.7.721 Advanced Threat Protection scanning in progress.

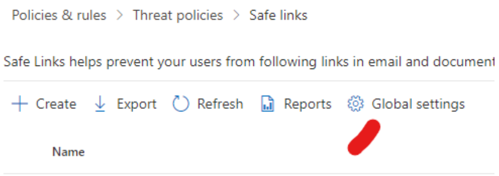
No detail information available.

SAFE LINKS

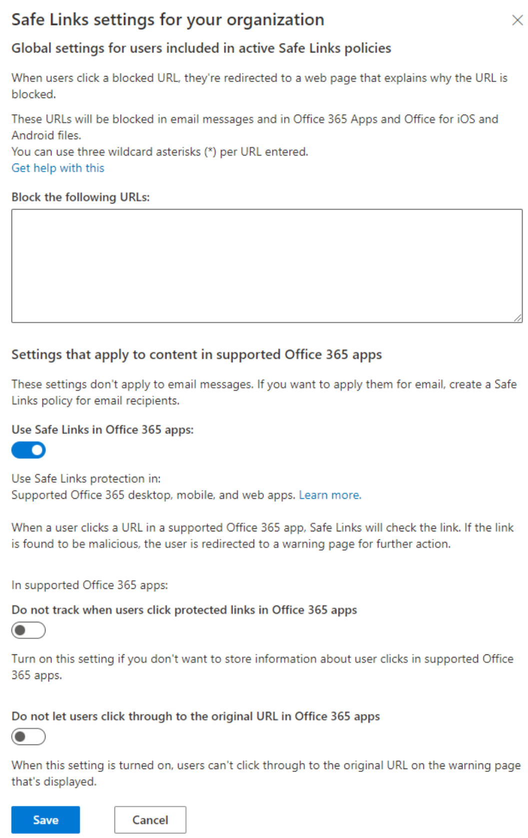
Safe Links helps prevent your users from following links in email and documents that go to web sites recognized as malicious.
Time of click Protections

GLOBAL SETTINGS – SAFE LINKS

Open Global Settings and Make Sure – Use Safe Links in Office 365 is Enabled. This will make Sure Safe Link work in Office Applications like Work, Excel, Power Point etc..



Safe Links helps prevent your users from following links in email and document



Safe Links settings for your organization

Global settings for users included in active Safe Links policies

When users click a blocked URL, they're redirected to a web page that explains why the URL is blocked.

These URLs will be blocked in email messages and in Office 365 Apps and Office for iOS and Android files.
You can use three wildcard asterisks (*) per URL entered.
Get help with this

Block the following URLs:

Settings that apply to content in supported Office 365 apps

These settings don't apply to email messages. If you want to apply them for email, create a Safe Links policy for email recipients.

Use Safe Links in Office 365 apps:
●

Use Safe Links protection in:
Supported Office 365 desktop, mobile, and web apps. Learn more.

When a user clicks a URL in a supported Office 365 app, Safe Links will check the link. If the link is found to be malicious, the user is redirected to a warning page for further action.

In supported Office 365 apps:

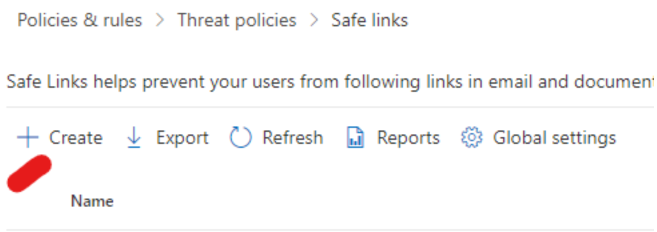
Do not track when users click protected links in Office 365 apps
○

Turn on this setting if you don't want to store information about user clicks in supported Office 365 apps.

Do not let users click through to the original URL in Office 365 apps
○

When this setting is turned on, users can't click through to the original URL on the warning page that's displayed.

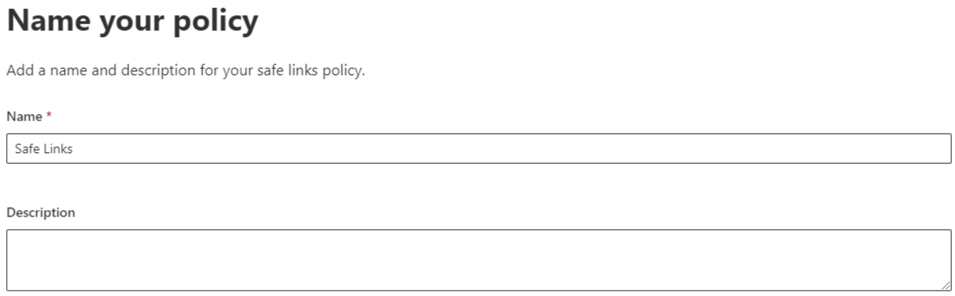
POLICY SETTINGS – SAFE LINKS



Policies & rules > Threat policies > Safe links

Safe Links helps prevent your users from following links in email and documen

1. Create a new Safe Links Policy
2. Give the Policy a Name and a Description



Name your policy

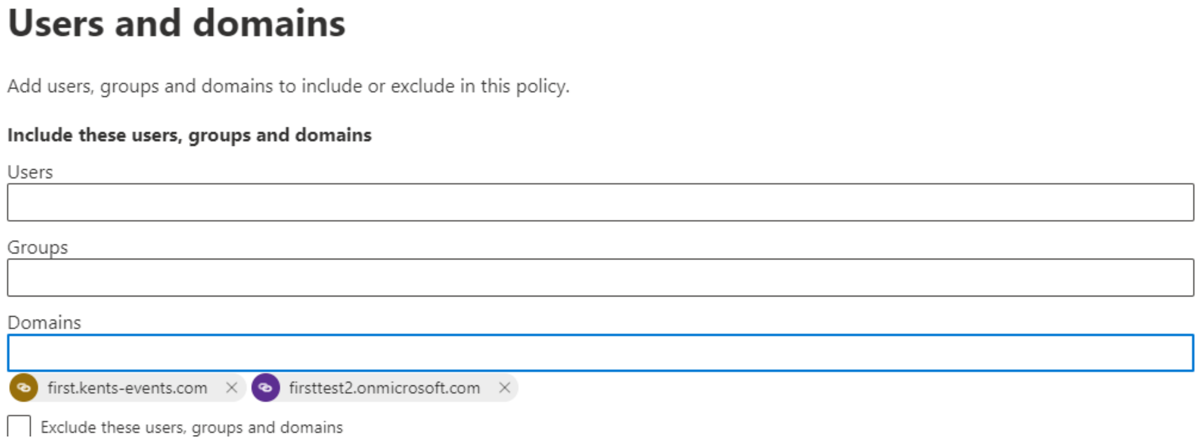
Add a name and description for your safe links policy.

Name *

Safe Links

Description

3. Add your domain(s) to the policy



Users and domains

Add users, groups and domains to include or exclude in this policy.

Include these users, groups and domains

Users

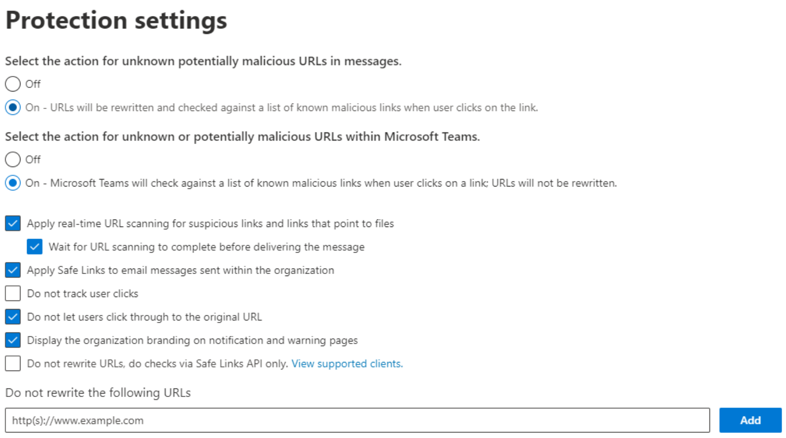
Groups

Domains

first.kents-events.com ✕ firsttest2.onmicrosoft.com ✕

□ Exclude these users, groups and domains

4. Activate following settings



Protection settings

Select the action for unknown potentially malicious URLs in messages.

○ Off

● On - URLs will be rewritten and checked against a list of known malicious links when user clicks on the link.

Select the action for unknown or potentially malicious URLs within Microsoft Teams.

○ Off

● On - Microsoft Teams will check against a list of known malicious links when user clicks on a link; URLs will not be rewritten.

☑ Apply real-time URL scanning for suspicious links and links that point to files

  ☑ Wait for URL scanning to complete before delivering the message

☑ Apply Safe Links to email messages sent within the organization

□ Do not track user clicks

☑ Do not let users click through to the original URL

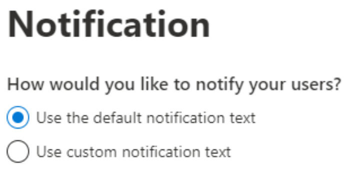
☑ Display the organization branding on notification and warning pages

□ Do not rewrite URLs, do checks via Safe Links API only. View supported clients.

Do not rewrite the following URLs

http(s)://www.example.com

5. Use the default notification and Submit the policy.



Notification

How would you like to notify your users?

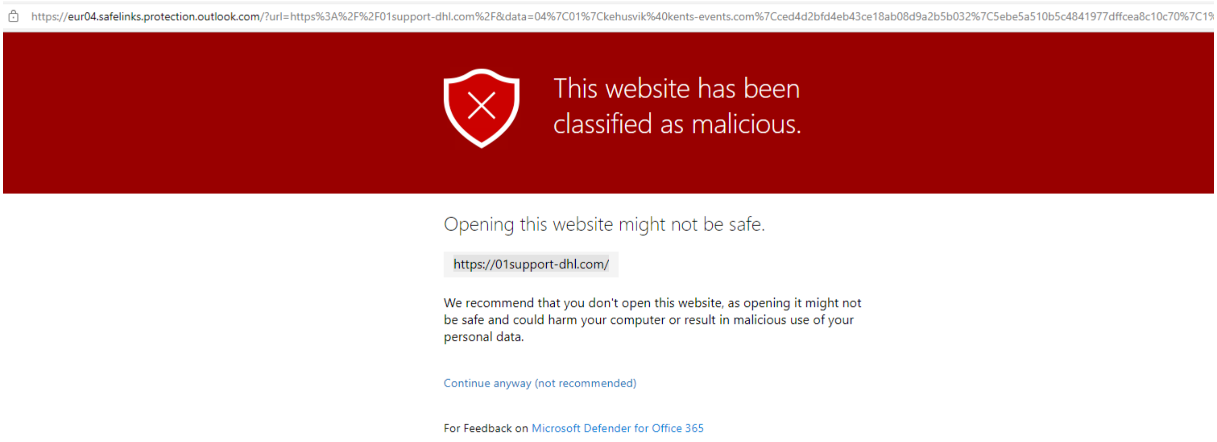
● Use the default notification text

○ Use custom notification text

TEST SCENARIO

Send an Email with the following link included https://smartscreentestratings2(.)net/ - Remove the () from the URL.

You can also test with a link to a



https://eur04.safelinks.protection.outlook.com/?url=https%3A%2F%2F01support-dhl.com%2F&data=04%7C01%7Ckehusvik%40kents-events.com%7Cced4d2bfd4eb43ce18ab08d9a2b5b032%7C5ebe5a510b5c4841977dffcea8c10c70%7C1

This website has been classified as malicious.

Opening this website might not be safe.

https://01support-dhl.com/

We recommend that you don't open this website, as opening it might not be safe and could harm your computer or result in malicious use of your personal data.

Continue anyway (not recommended)

For Feedback on Microsoft Defender for Office 365

MICROSOFT CLOUD APP SECURITY

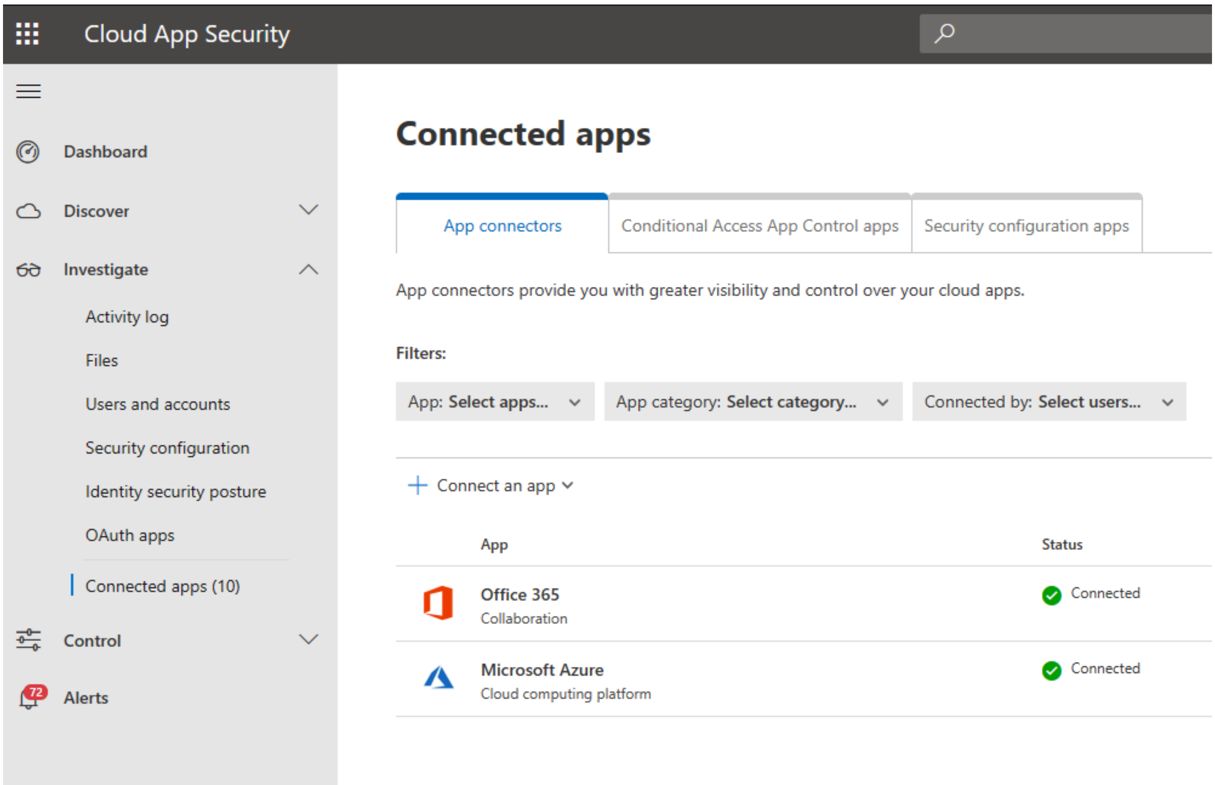
SETUP AND CONFIGURATION

CONNECT APPS TO MCAS

To get insight into Office 365 activities and files the app must be connected in MCAS.

Cloud App Security Portal -> Investigate -> Connected apps

Deep link: https://portal.cloudappsecurity.com/#/connected-apps



Connected apps

App connectors | Conditional Access App Control apps | Security configuration apps

App connectors provide you with greater visibility and control over your cloud apps.

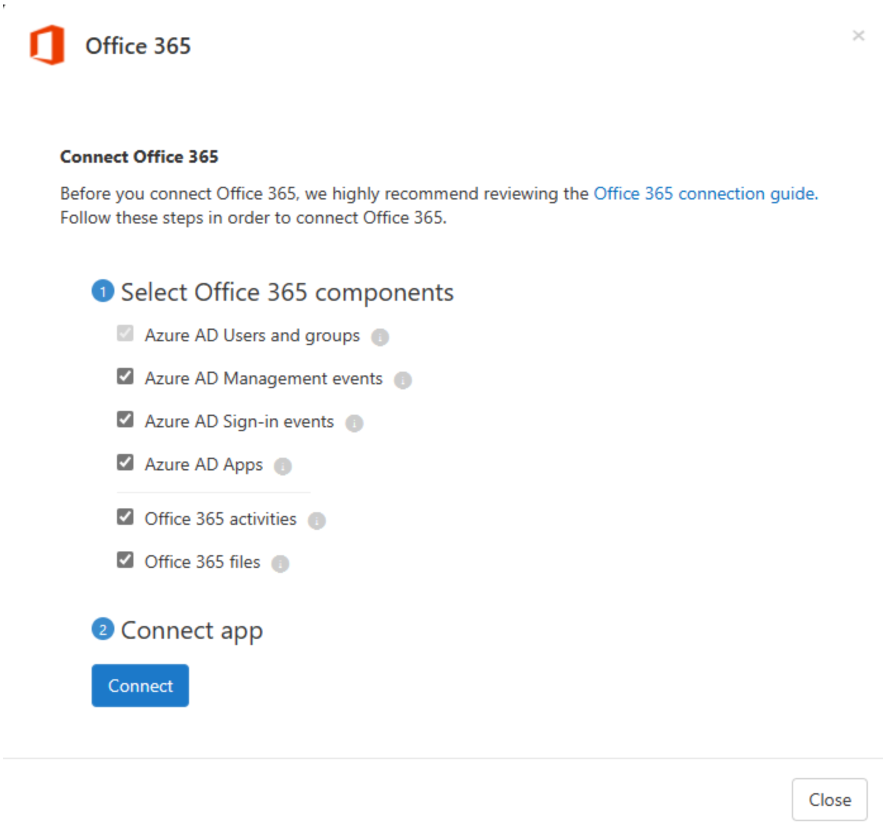
Filters:

App: Select apps... | App category: Select category... | Connected by: Select users...

+ Connect an app

App	Status
Office 365 Collaboration	✓ Connected
Microsoft Azure Cloud computing platform	✓ Connected

Click “Connect an app” and Choose “Office 365”



Office 365

Connect Office 365

Before you connect Office 365, we highly recommend reviewing the Office 365 connection guide.
Follow these steps in order to connect Office 365.

1 Select Office 365 components

☑ Azure AD Users and groups
☑ Azure AD Management events
☑ Azure AD Sign-in events
☑ Azure AD Apps
☑ Office 365 activities
☑ Office 365 files

2 Connect app

Choose all components and click connect. Authenticate with your admin user.

INITIAL CONFIGURATION OF MCAS

Initial configuration is done in the “settings” page of MCAS.

Click ⚙ in the top right corner -> choose “Settings”

Deep link: https://portal.cloudappsecurity.com/#/settings

Scroll down to “Microsoft Defender for Endpoint” in the Settings menu

- Enable “Enforce app access”
- Alerts: Informational

Scroll down to “User enrichment”

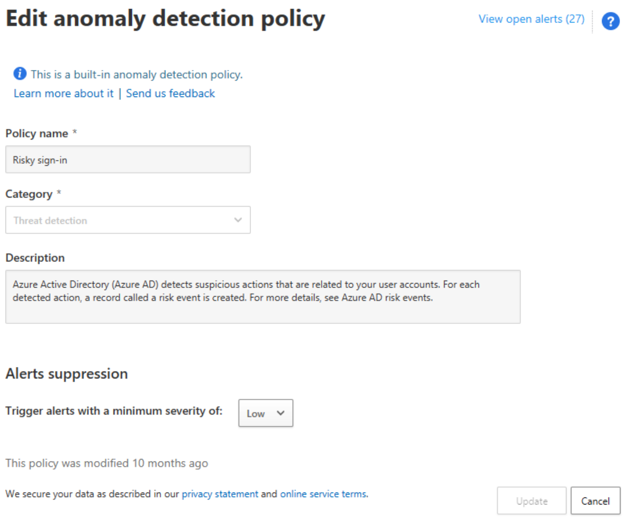
- Enable “enrich discovered user identifiers with Azure Active Directory usernames”

Scroll down to “Microsoft Defender for Identity”

- Normally “Microsoft defender for identity data integration” should be enabled, but this will require an on-premises Domain Controller with Defender for identity connector installed. This will therefore be skipped in this lab.

Scroll down to “Azure AD Identity Protection”

- Enable “Azure AD Identity protection alert integration”
- Click in “edit Policies” after “Only alerts with high severity are triggered by default. Change the severity level of all policies to “low”



Edit anomaly detection policy

This is a built-in anomaly detection policy.
Learn more about it | Send us feedback

Policy name *: Risky sign-in

Category *: Threat detection

Description: Azure Active Directory (Azure AD) detects suspicious actions that are related to your user accounts. For each detected action, a record called a risk event is created. For more details, see Azure AD risk events.

Alerts suppression

Trigger alerts with a minimum severity of: Low

This policy was modified 10 months ago

We secure your data as described in our privacy statement and online service terms.

Scroll down to “App Governance”

- Enable “App Governance integration”

Scroll down to “Microsoft information protection”

- Enable “automatically scan new files for Microsoft Information Protection sensitivity labels and content inspection warnings”
- **Don’t** enable “only scan files for Microsoft Information Protection sensitivity labels and content inspection from this tenant”
- Grant permission to inspect protected files

Scroll down to “Files”

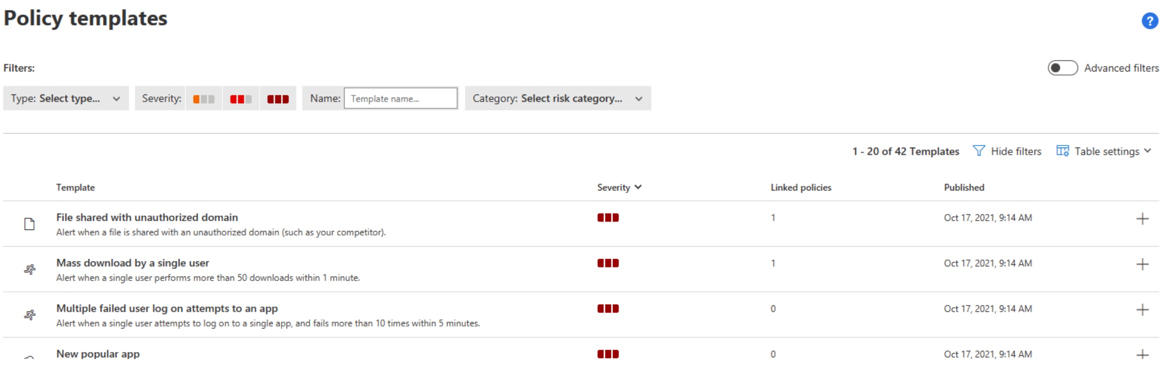
- Enable “File monitoring”
- Go to connected apps and update the Office 365 connector with Office 365 Files

CREATE A POLICY FROM EXISTING TEMPLATE

Cloud App Security Portal -> Control -> Templates

Deep link: https://portal.cloudappsecurity.com/#/policy/templates

Scroll down to or search for “mass download by a single user”



Policy templates

Filters:

Type: Select type... | Severity: 🟧⬜⬜ 🟥🟥⬜ 🟥🟥🟥 | Name: Template name... | Category: Select risk category...

Advanced filters

1 - 20 of 42 Templates | Hide filters | Table settings

Template	Severity	Linked policies	Published	
File shared with unauthorized domain Alert when a file is shared with an unauthorized domain (such as your competitor).	🟥🟥🟥	1	Oct 17, 2021, 9:14 AM	+
Mass download by a single user Alert when a single user performs more than 50 downloads within 1 minute.	🟥🟥🟥	1	Oct 17, 2021, 9:14 AM	+
Multiple failed user log on attempts to an app Alert when a single user attempts to log on to a single app, and fails more than 10 times within 5 minutes.	🟥🟥🟥	0	Oct 17, 2021, 9:14 AM	+
New popular app	🟥🟥🟥	0	Oct 17, 2021, 9:14 AM	+

Click on the + sign in the colum to right for that policy template

Configure the policy to reflect sensible settings. In this scenario we do set a configuration that’s makes it easy to trigger an alert:

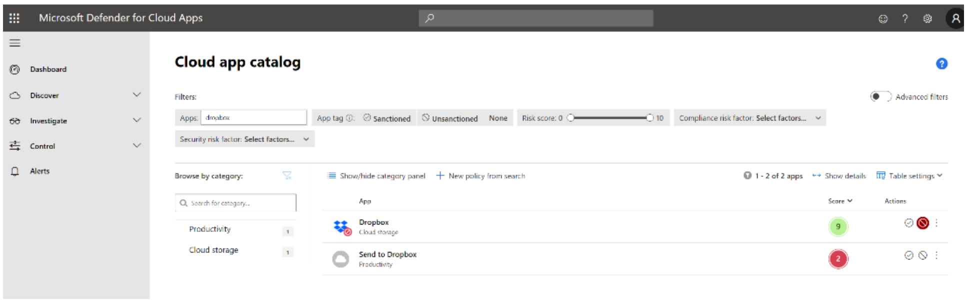
- Repeated activity:
  - Minimum repeated activities: 5
  - Whitin timeframe: 5 minutes
- Turn of the “count only unique target files or folders pr user”
- Create the Policy

UNSANCTION AND BLOCK ACCESS TO FACEBOOK

Search for Facebook in the Cloud app catalog

Cloud App Security Portal -> Discover -> Cloud App Catalog -> search for “dropbox”

Deep link:
https://portal.cloudappsecurity.com/#/catalog?text=contains(o:(searchType:i:1,adv:b:false),dropbox)



Cloud app catalog

Filters:

Apps: dropbox | App tag ⓘ: Sanctioned | Unsanctioned | None | Risk score: 0 — 10 | Compliance risk factor: Select factors... | Security risk factor: Select factors...

Advanced filters

Browse by category: Search for category...

Category	
Productivity	1
Cloud storage	1

Show/hide category panel | New policy from search | 1 - 2 of 2 apps | Show details | Table settings

App	Score	Actions
Dropbox Cloud storage	9	
Send to Dropbox Productivity	2	

In the Actions column, click on the ⊘ icon for the Facebook app.

Confirm that you want to block the app.

With this MCAS will put the URL identifier for Facebook as a Custom Indicator in Defender for Endpoint. Defender for Endpoint with network protection will then block any access to that URL from the device.

TEST SCENARIO

1. MASS DOWNLOAD OF FILES FROM OFFICE 365

Log inn to https://portal.office.com with your testuser3

- Start Teams
- Create a new Team
- Access the files tab
- Create 6 new Office 365 files with random content (=rand())
- Download each of the 6 files to your computer, one by one, within 5minutes.

Expected result:

An alert about "Mass download by single user" are created in MCAS

2. BLOCKED ACCESS TO FACEBOOK FROM DEVICE

Log inn to your test computer, enabled with Microsoft Defender for Endpoint

- Try access www.facebook.com from a browser session

Expected result:

- Smart screen will block access to www.facebook.com showing a red alert page
- An alert is triggered in Defender for Endpoint

APPENDIX

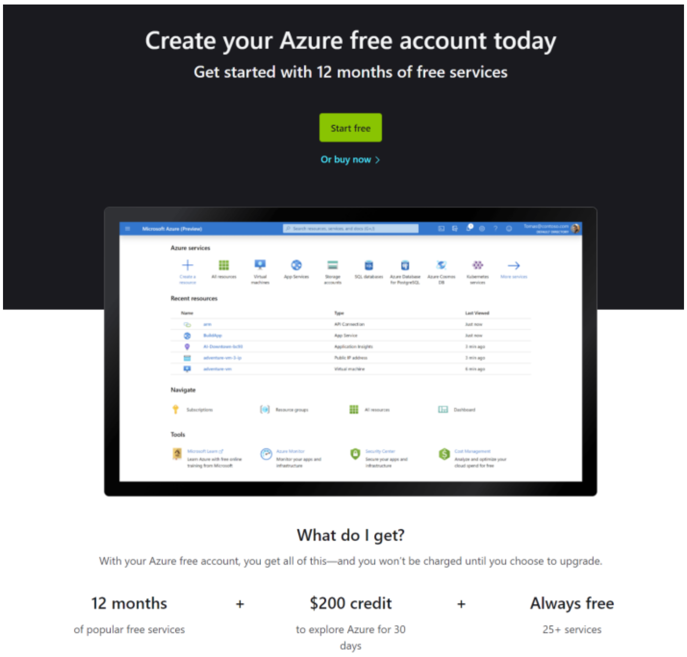
EXTRA: AZURE SENTINEL

SPECIAL REQUIREMENTS

For this extra task you will need an Azure Subscription – You will need a valid credit card to complete this sign-up.

The credit card will not be used, unless you choose to purchase some Azure services your selv

Create free Azure Subscription ($200 credit for 30days):



Create your Azure free account today

Get started with 12 months of free services

What do I get?

With your Azure free account, you get all of this—and you won't be charged until you choose to upgrade.

12 months + $200 credit + Always free

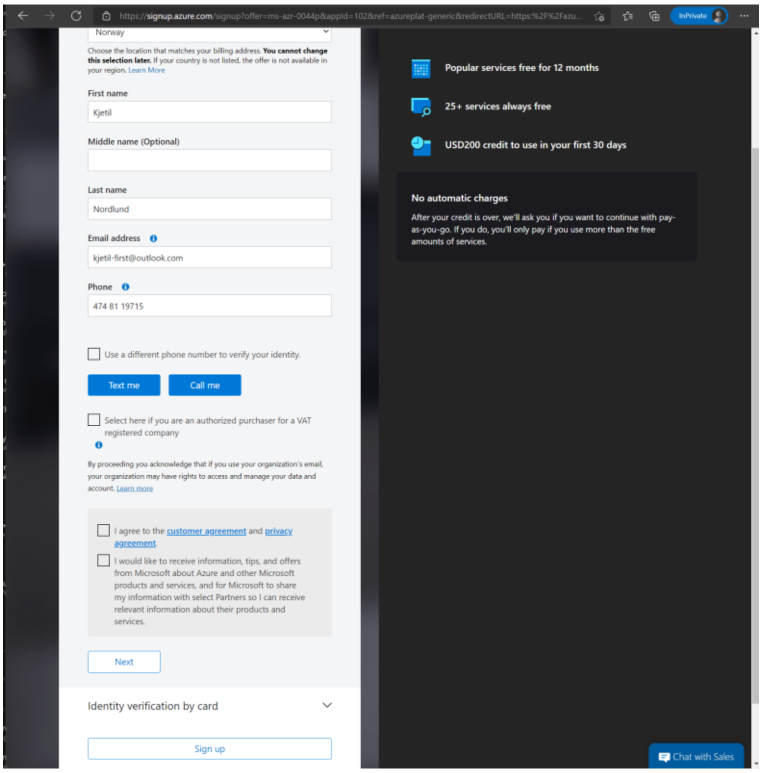
of popular free services

to explore Azure for 30 days

25+ services

https://signup.azure.com/signup?offer=ms-azr-0044p&appId=102&ref=azureplat-generic&redirectURL=https%3A%2F%2Fazure.microsoft.com%2Fen-us%2Fget-started%2Fwelcome-to-azure%2F&l=en-us&correlationId=4fb68cb5b20240c884a3e2ac0f885a90

Make sure you are logged in with the same account you created the Microsoft 365 E5 trial with



https://signup.azure.com/signup?offer=ms-azr-0044p&appId=102&ref=azureplat-generic&redirectURL=https:%2F%2Fazu...

Norway

Choose the location that matches your billing address. **You cannot change this selection later.** If your country is not listed, the offer is not available in your region. Learn More

First name: Kjetil

Middle name (Optional):

Last name: Nordlund

Email address: kjetil-first@outlook.com

Phone: 474 81 19715

□ Use a different phone number to verify your identity.

□ Select here if you are an authorized purchaser for a VAT registered company

By proceeding you acknowledge that if you use your organization's email, your organization may have rights to access and manage your data and account. Learn more

□ I agree to the customer agreement and privacy agreement.

□ I would like to receive information, tips, and offers from Microsoft about Azure and other Microsoft products and services, and for Microsoft to share my information with select Partners so I can receive relevant information about their products and services.

Identity verification by card

Popular services free for 12 months

25+ services always free

USD200 credit to use in your first 30 days

No automatic charges

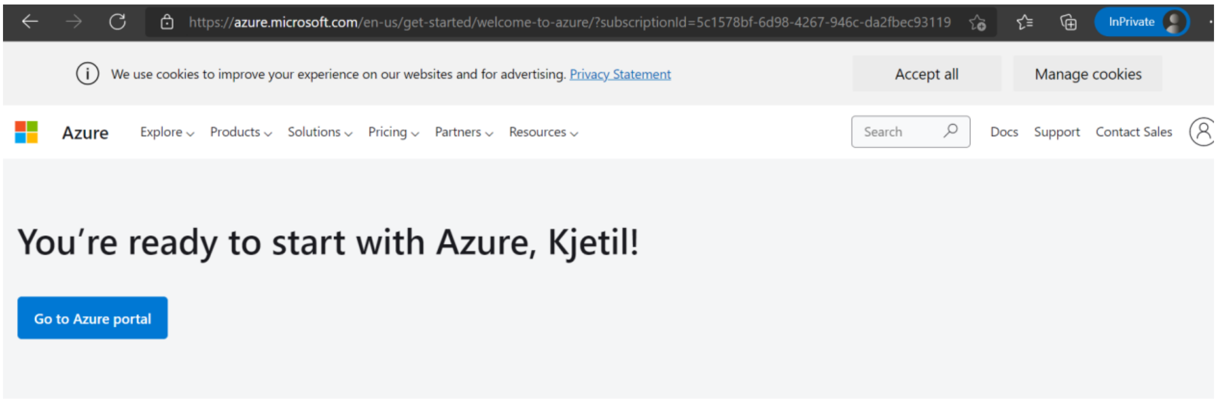
After your credit is over, we'll ask you if you want to continue with pay-as-you-go. If you do, you'll only pay if you use more than the free amounts of services.

Verify your phone number by clicking "text me"

Agree to the licensing terms and click next

You will need to register a valid Credit Card.

Click "sign-up"

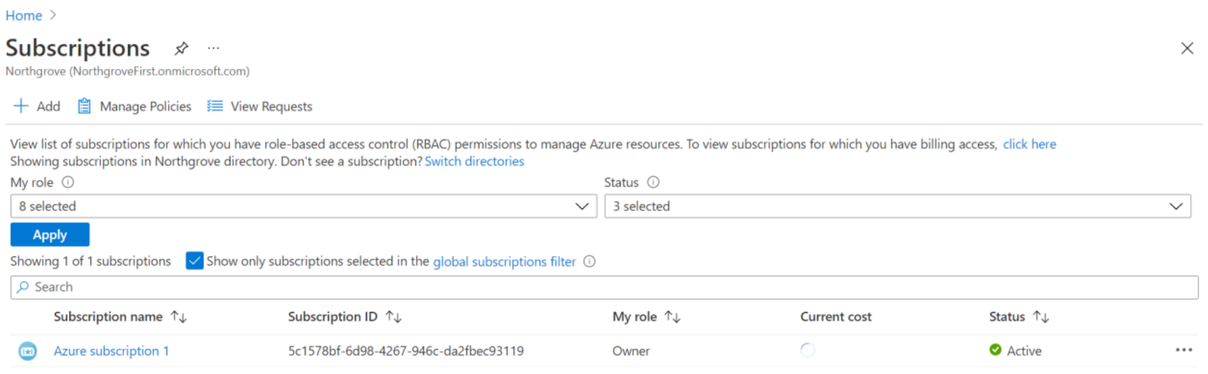


https://azure.microsoft.com/en-us/get-started/welcome-to-azure/?subscriptionId=5c1578bf-6d98-4267-946c-da2fbec93119

We use cookies to improve your experience on our websites and for advertising. Privacy Statement

You're ready to start with Azure, Kjetil!

Under Subscriptions in the Azure portal you should now se a Azure Subscription:



Northgrove (NorthgroveFirst.onmicrosoft.com)

View list of subscriptions for which you have role-based access control (RBAC) permissions to manage Azure resources. To view subscriptions for which you have billing access, click here
Showing subscriptions in Northgrove directory. Don't see a subscription? Switch directories

My role: 8 selected

Status: 3 selected

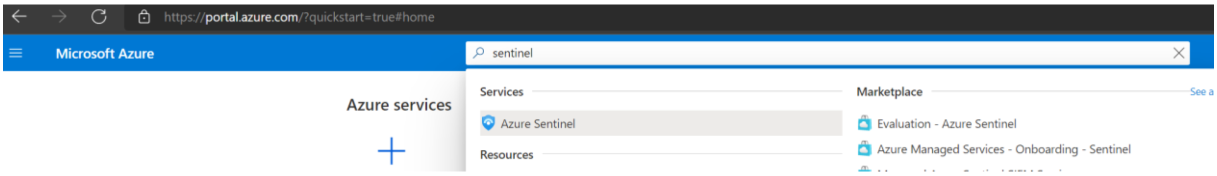
Showing 1 of 1 subscriptions ☑ Show only subscriptions selected in the global subscriptions filter

Subscription name	Subscription ID	My role	Current cost	Status
Azure subscription 1	5c1578bf-6d98-4267-946c-da2fbec93119	Owner		Active

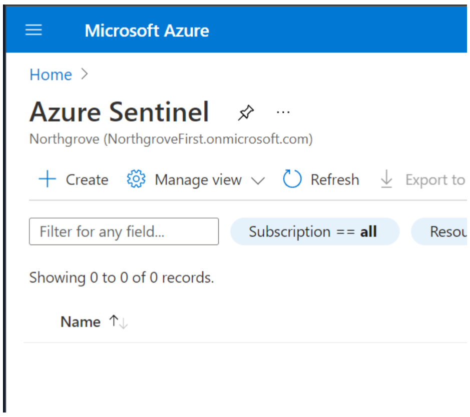
SETUP OF MICROSOFT SENTINEL

Create a Microsoft Sentinel workspace:

In the search bar in portal.azure.com, search for “Sentinel” and click “azure sentinel”:


https://portal.azure.com/?quickstart=true#home
Microsoft Azure
Azure services
Services
Azure Sentinel
Resources
Marketplace
See a
Evaluation - Azure Sentinel
Azure Managed Services - Onboarding - Sentinel

sentinel

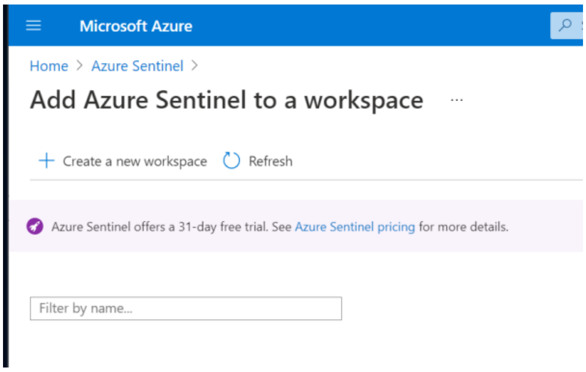


Northgrove (NorthgroveFirst.onmicrosoft.com)

Subscription == **all**

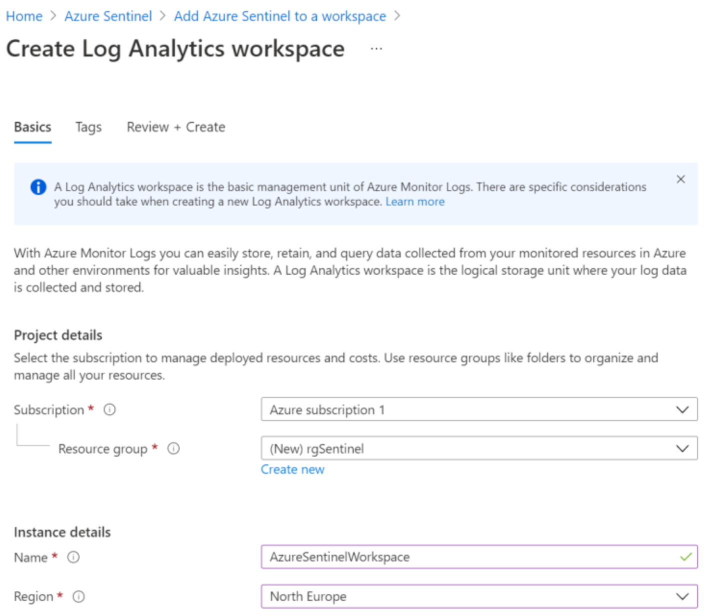
Showing 0 to 0 of 0 records.

Click “create” or “create azure sentinel”



Azure Sentinel offers a 31-day free trial. See Azure Sentinel pricing for more details.

Create a new workspace



Home > Azure Sentinel > Add Azure Sentinel to a workspace >

Create Log Analytics workspace ...

Basics | Tags | Review + Create

A Log Analytics workspace is the basic management unit of Azure Monitor Logs. There are specific considerations you should take when creating a new Log Analytics workspace. Learn more

With Azure Monitor Logs you can easily store, retain, and query data collected from your monitored resources in Azure and other environments for valuable insights. A Log Analytics workspace is the logical storage unit where your log data is collected and stored.

Project details

Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

Subscription *: Azure subscription 1

Resource group *: (New) rgSentinel

Create new

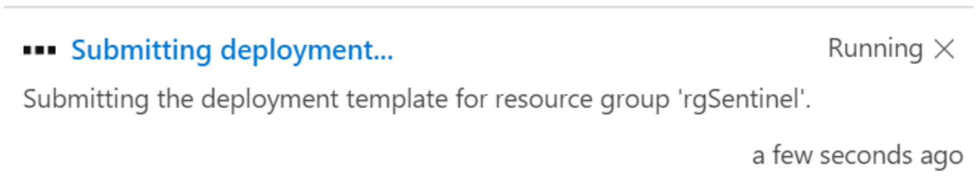
Instance details

Name *: AzureSentinelWorkspace

Region *: North Europe

Create new resource group, choose a region and name your log analytics workspace

Click Create

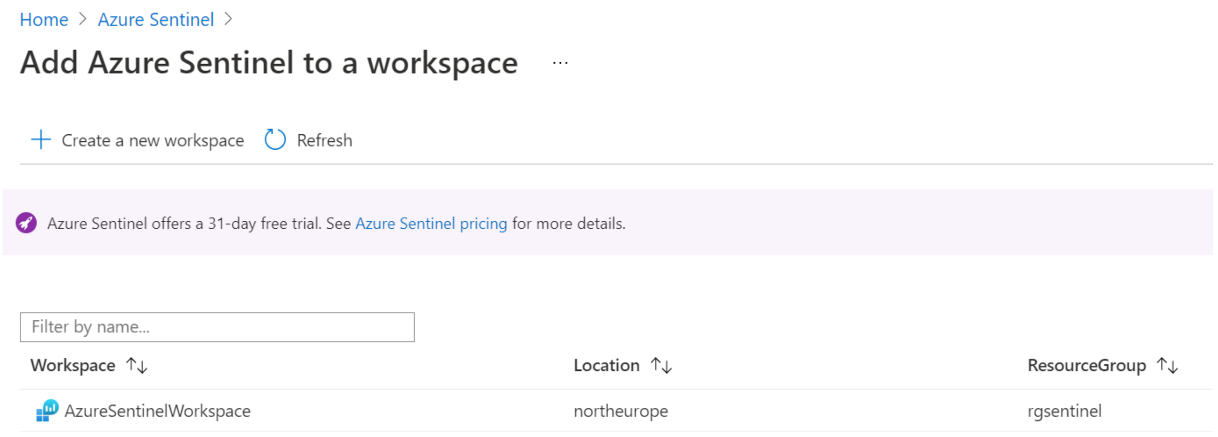


Submitting deployment... Running

Submitting the deployment template for resource group 'rgSentinel'.

a few seconds ago

Wait for deployment to be ready – and your Log Analytics workspace will show up in the workspace list



Home > Azure Sentinel >

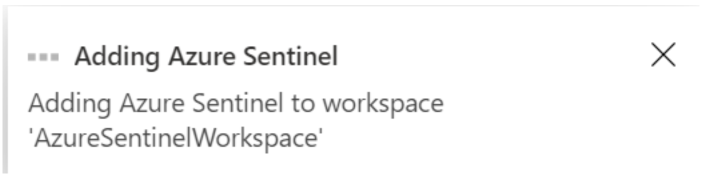
Add Azure Sentinel to a workspace ...

Azure Sentinel offers a 31-day free trial. See Azure Sentinel pricing for more details.

Filter by name...

Workspace ↑↓	Location ↑↓	ResourceGroup ↑↓
AzureSentinelWorkspace	northeurope	rgsentinel

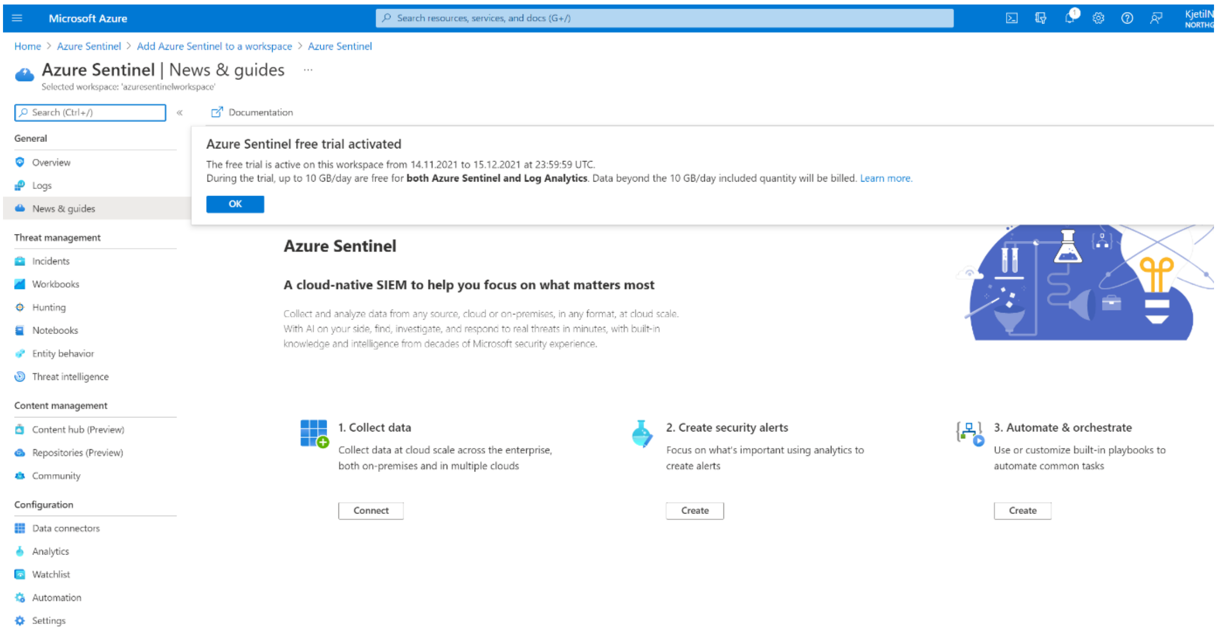
Choose the workspace and click “add”



Adding Azure Sentinel

Adding Azure Sentinel to workspace 'AzureSentinelWorkspace'

Wait for Microsoft Sentinel to be provisioned



Azure Sentinel | News & guides

Selected workspace: 'azuresentinelworkspace'

Azure Sentinel free trial activated

The free trial is active on this workspace from 14.11.2021 to 15.12.2021 at 23:59:59 UTC.
During the trial, up to 10 GB/day are free for **both Azure Sentinel and Log Analytics**. Data beyond the 10 GB/day included quantity will be billed. Learn more.

Azure Sentinel

A cloud-native SIEM to help you focus on what matters most

Collect and analyze data from any source, cloud or on-premises, in any format, at cloud scale. With AI on your side, find, investigate, and respond to real threats in minutes, with built-in knowledge and intelligence from decades of Microsoft security experience.

1. Collect data
Collect data at cloud scale across the enterprise, both on-premises and in multiple clouds

2. Create security alerts
Focus on what's important using analytics to create alerts

3. Automate & orchestrate
Use or customize built-in playbooks to automate common tasks

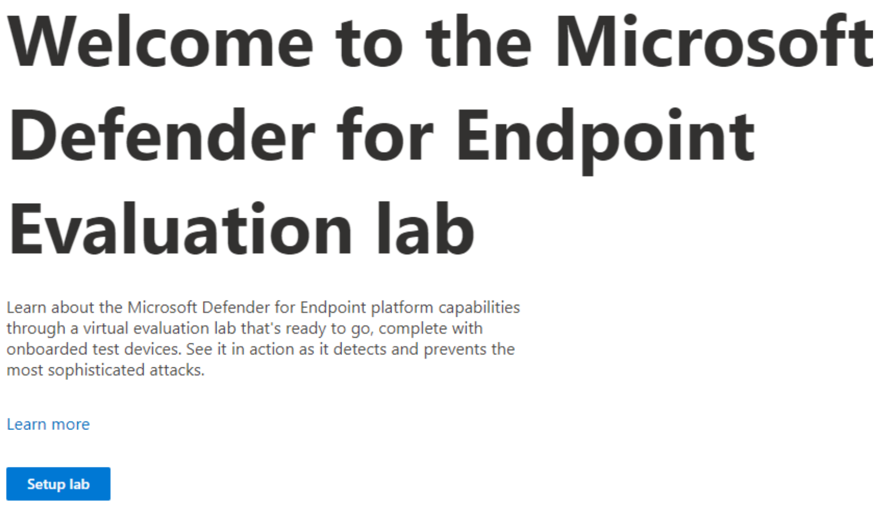
Microsoft Sentinel is ready to use

CONFIGURATION OF MICROSOFT SENTINEL

TEST SCENARIO

ENROLL EVALUATION LAB

[Microsoft Defender for Endpoint evaluation lab | Microsoft Docs]



Welcome to the Microsoft Defender for Endpoint Evaluation lab

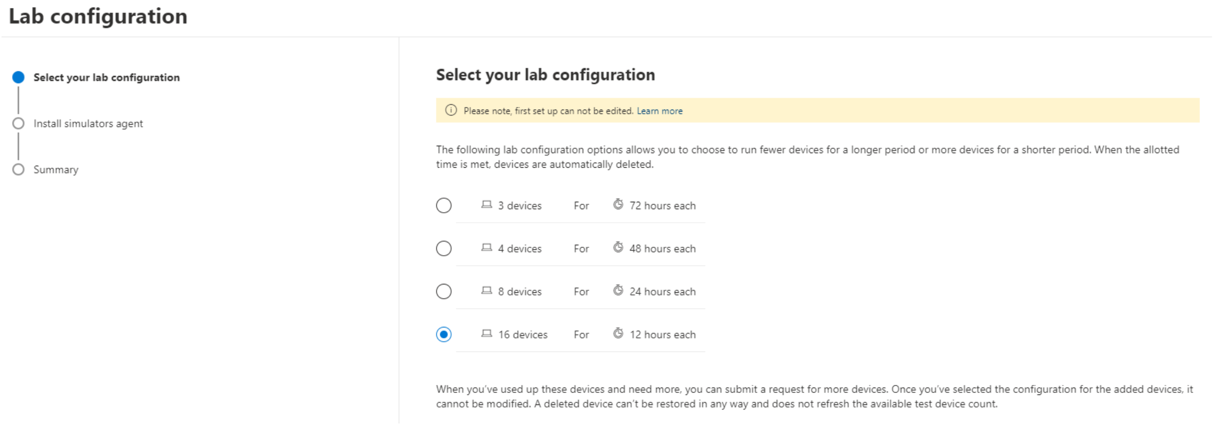
Learn about the Microsoft Defender for Endpoint platform capabilities through a virtual evaluation lab that's ready to go, complete with onboarded test devices. See it in action as it detects and prevents the most sophisticated attacks.

Learn more

The Microsoft Defender for Endpoint evaluation lab is designed to eliminate the complexities of device and environment configuration so that you can focus on evaluating the capabilities of the platform, running simulations, and seeing the prevention, detection, and remediation features in action.

In the security.microsoft.com portal go to; Endpoints > Evaluation and learning > Evaluation lab

1. Click on Setup lab
2. Select the setup of your choice. This can only be done once and cannot be changed.
   I recommend 16 devices for 12 hours.



Select your lab configuration

ⓘ Please note, first set up can not be edited. Learn more

The following lab configuration options allows you to choose to run fewer devices for a longer period or more devices for a shorter period. When the allotted time is met, devices are automatically deleted.

○ 3 devices For 72 hours each

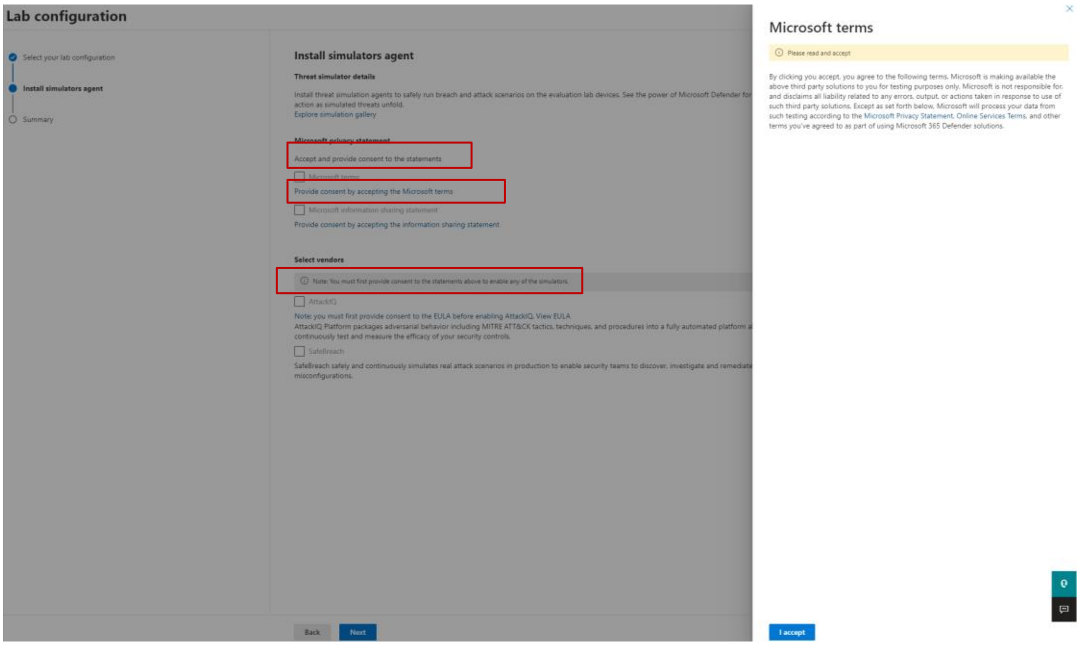
○ 4 devices For 48 hours each

○ 8 devices For 24 hours each

● 16 devices For 12 hours each

When you've used up these devices and need more, you can submit a request for more devices. Once you've selected the configuration for the added devices, it cannot be modified. A deleted device can't be restored in any way and does not refresh the available test device count.

3. Accept and provide the Microsoft terms and Eula for AttackIQ and SafeBreach (click on the links to accept)



Lab configuration

- Select your lab configuration
- Install simulators agent
- Summary

Install simulators agent

Threat simulator details

Install threat simulation agents to safely run breach and attack scenarios on the evaluation lab devices. See the power of Microsoft Defender for action as simulated threats unfold.
Explore simulation gallery

Microsoft privacy statement

Accept and provide consent to the statements

□ Microsoft terms
Provide consent by accepting the Microsoft terms

□ Microsoft information sharing statement
Provide consent by accepting the information sharing statement

Select vendors

ⓘ Note: You must first provide consent to the statements above to enable any of the simulators.

□ AttackIQ
Note: you must first provide consent to the EULA before enabling AttackIQ. View EULA
AttackIQ Platform packages adversarial behavior including MITRE ATT&CK tactics, techniques, and procedures into a fully automated platform a continuously test and measure the efficacy of your security controls.

□ SafeBreach
SafeBreach safely and continuously simulates real attack scenarios in production to enable security teams to discover, investigate and remediate misconfigurations.

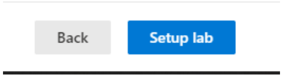
Microsoft terms

ⓘ Please read and accept

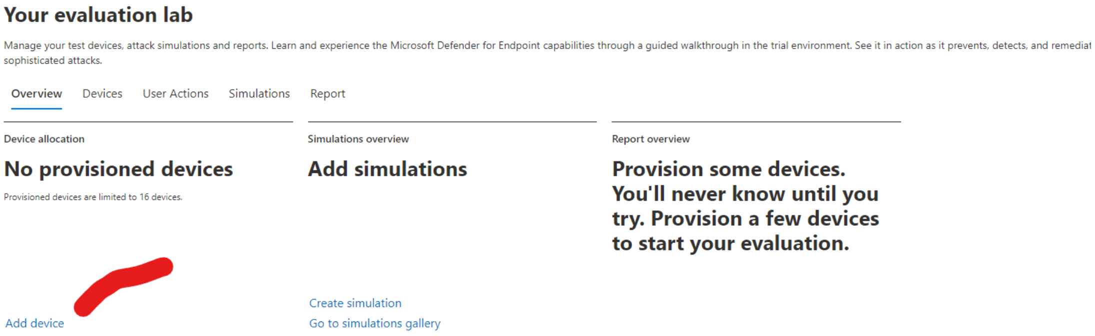
By clicking you accept, you agree to the following terms. Microsoft is making available the above third party solutions to you for testing purposes only. Microsoft is not responsible for, and disclaims all liability related to any errors, output, or actions taken in response to use of such third party solutions. Except as set forth below, Microsoft will process your data from such testing according to the Microsoft Privacy Statement, Online Services Terms, and other terms you've agreed to as part of using Microsoft 365 Defender solutions.

Choose both "AttackIQ" and "SafeBreach" and fill in your trial email and name

4. Click on the Setup lab



5. Click on Add device and select the default Windows 10 machine with Java, Office, Python, Sysinternals.



Your evaluation lab

Manage your test devices, attack simulations and reports. Learn and experience the Microsoft Defender for Endpoint capabilities through a guided walkthrough in the trial environment. See it in action as it prevents, detects, and remediat sophisticated attacks.

Device allocation

No provisioned devices

Provisioned devices are limited to 16 devices.

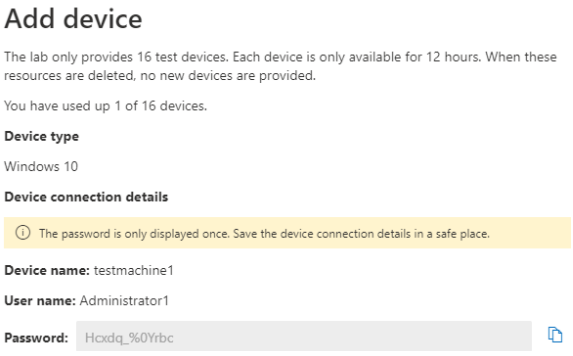
Simulations overview

Add simulations

Report overview

Provision some devices. You'll never know until you try. Provision a few devices to start your evaluation.

6. Remember to Copy and paste the Username and Password for the machine.



Add device

The lab only provides 16 test devices. Each device is only available for 12 hours. When these resources are deleted, no new devices are provided.

You have used up 1 of 16 devices.

Device type

Windows 10

Device connection details

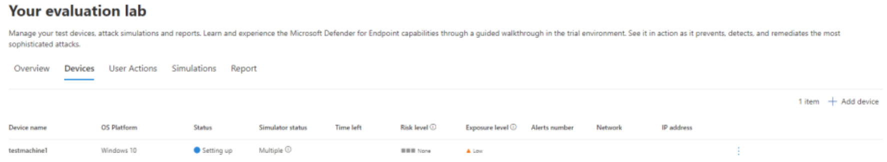
ⓘ The password is only displayed once. Save the device connection details in a safe place.

Device name: testmachine1

User name: Administrator1

Password: Hcxdq_%0Yrbc

7. The device will now be provisioned in the back ground. When done Create one more machine.



Your evaluation lab

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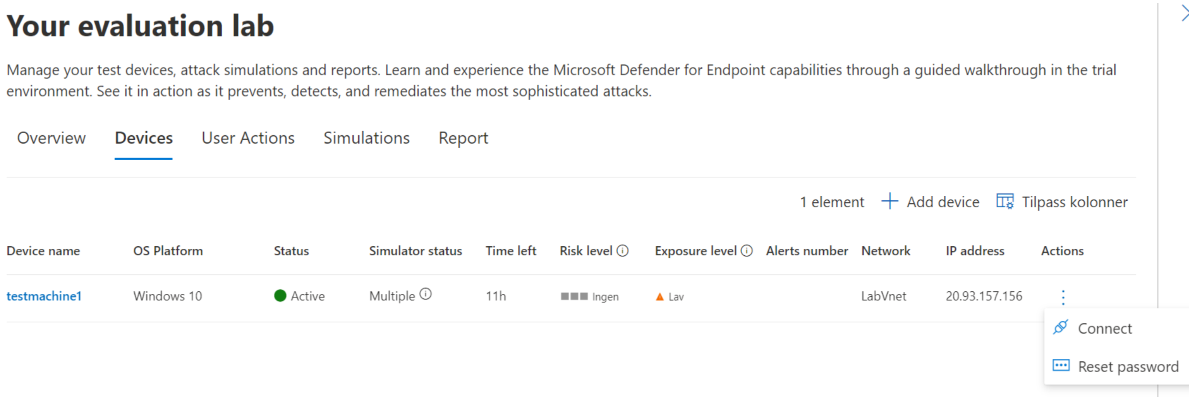
Device name	OS Platform	Status	Simulator status	Time left	Risk level ⓘ	Exposure level ⓘ	Alerts number	Network	IP address
testmachine1	Windows 10	● Setting up	Multiple ⓘ		■■■ None	▲ Low			

If using an Evaluation LAB machine, open Remote Desktop and Log in to the device with the Provided Username and Password. To be able to Add the machine to Azure AD and Endpoint Manager we need to disable NLA – NB! **Only needed for VM in Azure or Evaluation LAB.**



Your evaluation lab

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Device name	OS Platform	Status	Simulator status	Time left	Risk level ⓘ	Exposure level ⓘ	Alerts number	Network	IP address	Actions
testmachine1	Windows 10	● Active	Multiple ⓘ	11h	■■■ Ingen	▲ Lav		LabVnet	20.93.157.156	⋮

DISABLE NETWORK LEVEL AUTENTICATION (NLA) – NOT RECOMMENDED IN PRODUCTION

Run this powershell script in and administrator elevated powershell prompt:

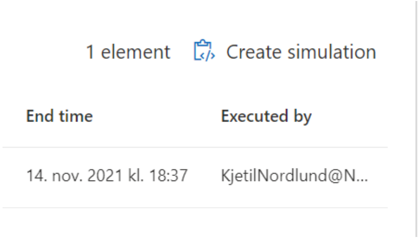
```
Write-Output 'Configuring registry to disable Network Level Authentication (NLA).'
$path = 'HKLM:\SYSTEM\CurrentControlSet\Control\Terminal Server\WinStations\RDP-Tcp'
Set-ItemProperty -Path $path -Name SecurityLayer -Type DWord -Value 0
Set-ItemProperty -Path $path -Name UserAuthentication -Type DWord -Value 0
Set-ItemProperty -Path $path -Name fAllowSecProtocolNegotiation -Type DWord -Value 0
Write-Output 'Restart the VM for the change to take effect.'
```

Reboot the machine

RUN A EVALUATION LAB TEST SCENARIO

In the evaluation lab page select the “Simulations” pane

Click “Create simulation”



End time	Executed by
14. nov. 2021 kl. 18:37	KjetilNordlund@N...

Choose:

AttackIQ and Persistence methods as the simulation, and run it on your lab machine

Click “Create simulation”

LAB SIMULATION QUESTION

ATTACKIQ - PERSISTENCE METHODS

1. What is the IP from where the RDP brute-force happened?
2. Describe the changes made to file association on the computer?
3. What script language executable was used to run the commands?
    a. What was the name of the script file?
4. What is the Registry key, Value name, value data and value tape for the registry changed for logon script registration?
    a. What was the previous values?
5. Which URL does ai_exec_server.exe connect to?
6. What is the InitiatingProcessCommandLine for the process creating the attackiq_appcert_dll.dll file?
7. What is the remote IP and URL that pyhton.exe establishes an outbound connection to?

SAFEBRACH AND KNOWN RANSOMWRE INFECTION:

1. What is the original name of the initial file first run with malware to the computer?
    a. What kind of malware was detected?
2. What is the IP and TCP port to the host the SafeBreach simulator is connecting to?
3. What is the name of the activity group associated to this attack?
4. What is the filename for the WannaCrypt ransomware detected?
    a. What is the Virus Total ratio for this file?