Microsoft 365 tenant setup & configuration Been there, done that?

Othomasvochten

About me



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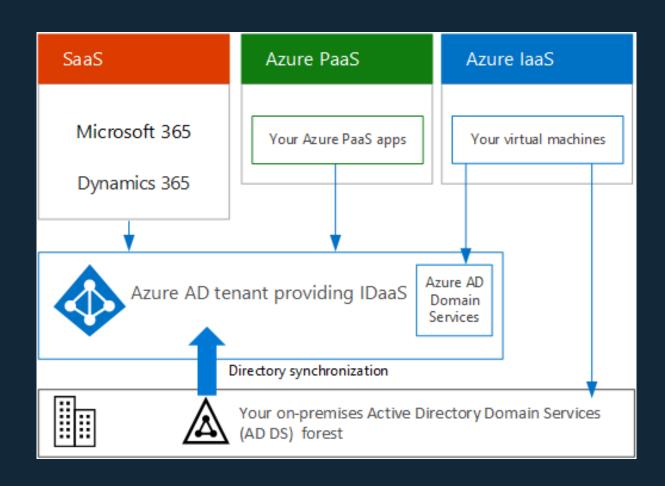


Agenda

- 1. General tenant considerations
- 2. Multi-Geo & Multi-Tenant
- 3. Domains, DNS & networking
- 4. Organizational settings
- 5. Security, security, security!

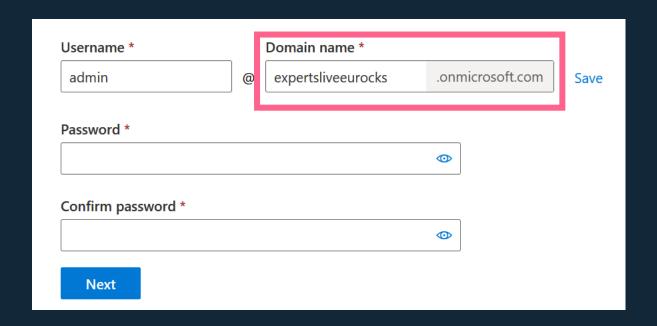
General tenant considerations

Understanding the Microsoft 365 hierarchy

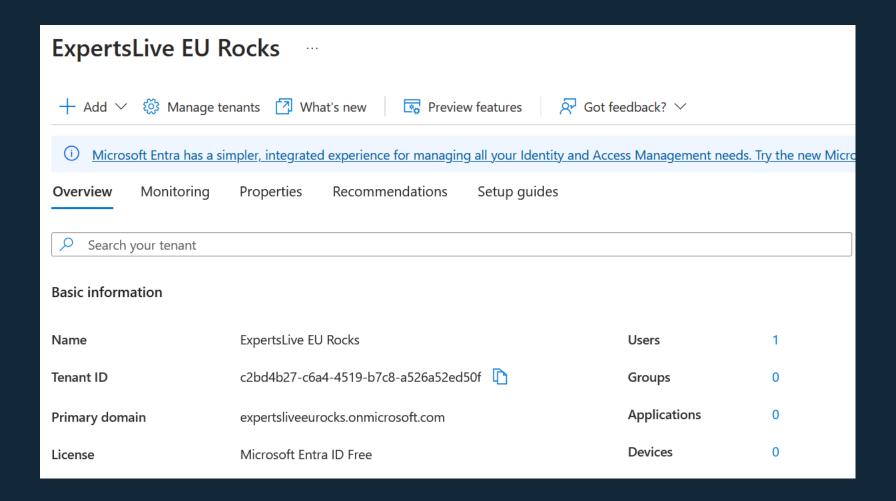


Creating a new tenant

https://signup.microsoft.com



Tenant properties in Entra ID



About that Tenant ID 💎

It's public information!

https://www.whatismytenantid.com



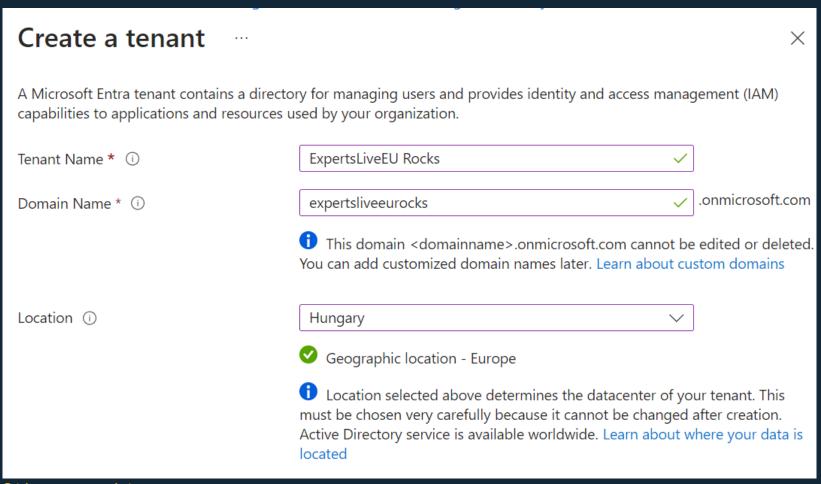


Here is the tenant ID for thomasvochten.com

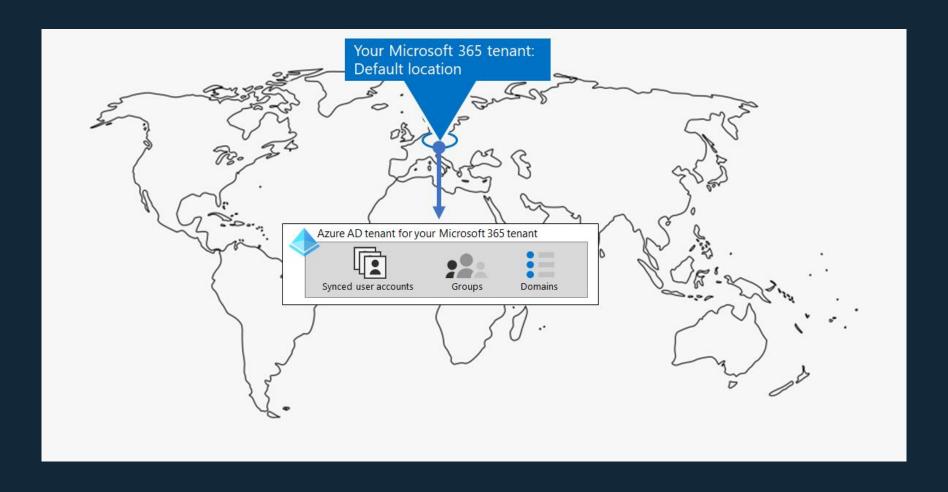
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Copy to clipboard

Creating a new tenant in Entra ID



First things first. Where's my data?



Data Residency primer



Default Geography of the Microsoft Entra ID Tenant



Available Geographies for a given service

First things first. Where's my data?

Settings > Org Settings > Organization profile > Data location

Data location

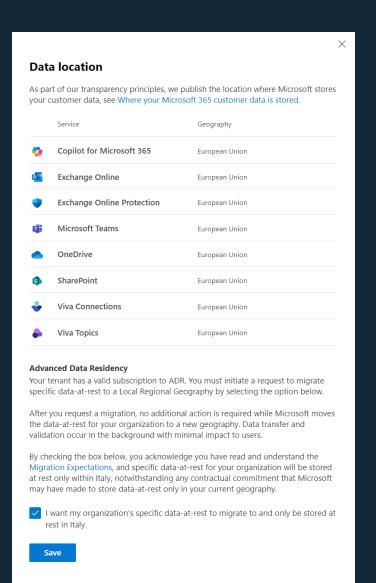
As part of our transparency principles, we publish the location where Microsoft stores your customer data, see Where your Microsoft 365 customer data is stored.

	Service	Geography
	Exchange Online	European Union
	Exchange Online Protection	European Union
i	Microsoft Teams	European Union
\otimes	OneDrive	European Union
\$	SharePoint	European Union
0	Viva Connections	European Union
\$	Viva Topics	European Union

This tenant is not eligible to purchase Microsoft 365 Advanced Data Residency addon because the tenant sign-up country is not available. Please see ADR Eligibility.

Workloads supported by the ADR add-on

- Exchange Online
- SharePoint and OneDrive
- Microsoft Teams
- Microsoft 365 Copilot
- Microsoft Defender for Office P1 and Exchange Online Protection
- Office for the Web
- Viva Connections
- Viva Topics
- Microsoft Purview



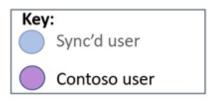
Multi-Geo & Multi-Tenant

Multi-geo

- Exchange, SharePoint, OneDrive, Teams
- Home region / Central geo vs Satellite geo
- Preferred data location (account attribute, eg "EUR")
- Data sovereignty (not performance)
- Move the data to a satellite geo (expect OneDrive: Start-SPOUserAndContentMove)
- Cross-region sync for a transparent experience
- EA & multi-geo licenses for at least 5% of accounts

Multi-tenant

Cross Tenant Synchronization



Fabrikam



Contoso





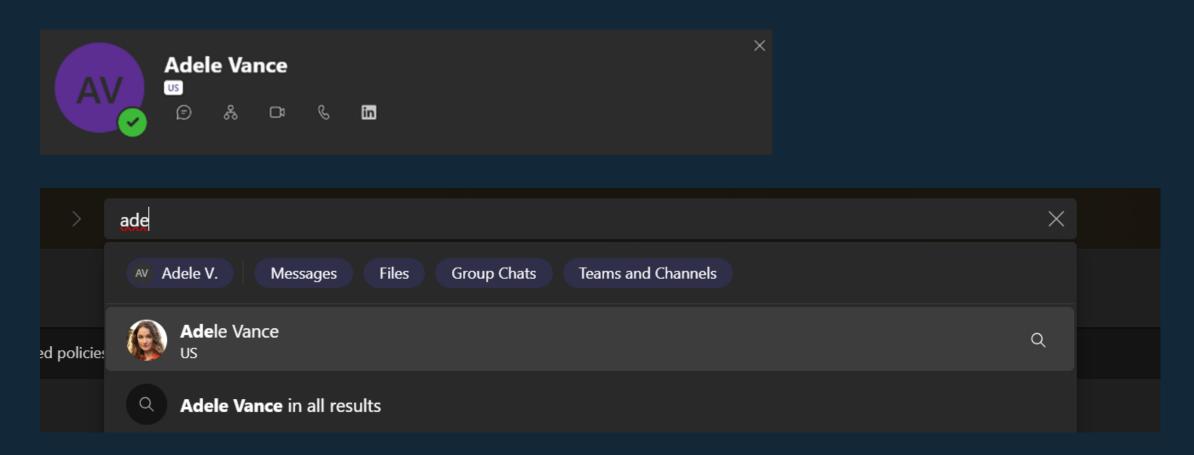
User synchronization





Source Tenant Target Tenant

Include an optional label



Multi-tenant

- Cross-tenant synchronization configuration is added with the name MTO_Sync_<TenantID>, but no sync jobs are created yet.
- Organization relationship is added to the cross-tenant access settings based on the multitenant organization templates for crosstenant access and identity synchronization.
- The multitenant org template for cross-tenant access will be set to automatically redeem user invitations, inbound as well as outbound.
- Maximum of five tenants in the multitenant organization is supported.
- Maximum of 100,000 users per tenant is supported.
- Teams on the web, macOS, Microsoft Teams Rooms (MTR), and VDI/AVD aren't supported.

Domains, DNS & networking

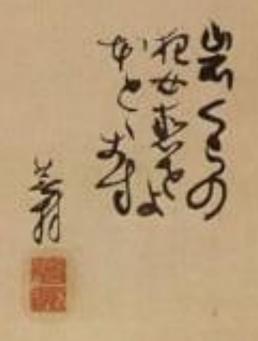
It's not DNS

There's no way it's DNS

It was DNS







Meet your "fallback domain"

thomasvochten.onmicrosoft.com

Managed at Microsoft 365 - Fallback domain

- used for default usernames, email routing,...
- used for your SharePoint Online & OneDrive URL's

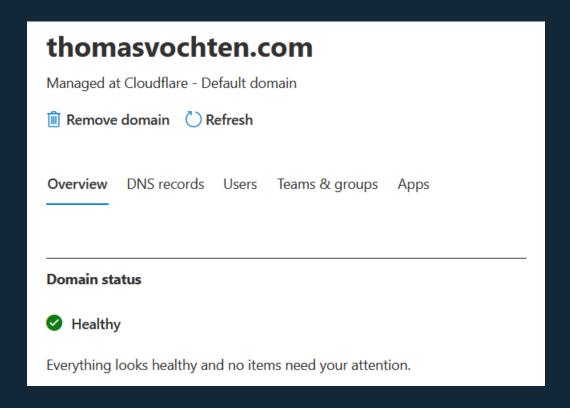
Changing yourdomain.sharepoint.com

- When would you want this?
- Less than 10K sites? Standard Tenant Rename
- Less than 100K sites? Advanced Tenant Rename
- Does not impact email addresses
- Not available for "special" clouds or in a multi-geo situation
- Temporary redirect for one year included

```
Start-SPOTenantRename -DomainName <DomainName> -ScheduledDateTime <YYYY-MM-DDTHH:MM:SS>
```

Custom domains

- Checking health regularly
- What if you have an external DNS provider?
- Subdomains only through a separate DNS hoster



Essential DNS records and why you need them

- TXT or MX record for verification of ownership (MS=ms XXXXXXXXX)
- MX record for email delivery
- CNAME & SRV records for other services such as Teams
- SPF TXT record to help prevent spam

Proper email authentication is key

Sender Policy Framework

SPF verifies the domain from which emails are sent

SPF protects companies from phishers who spoofed the **5321.MailFrom** address

Domain Keys Identified Mail

DKIM helps prevent attackers from sending messages that look like they came from your domain

DKIM adds a digital signature to email message headers

Domain-based Message and Reporting Compliance

DMARC protects companies from phishers who spoofed the **5322.From** email address

SPF only checks for spoofed **5321.MailFrom** addresses

SPF + DMARC provides complete address verification

Network optimization

- Local DNS & internet egress for M365 endpoints
- Bypass proxies and inspection devices
- Enable direct connection for VPN users

Minimizing latency by reducing round-trip times

Endpoints (URLs & IP ranges)

https://aka.ms/m365ip

- Web service is available (json)
- Subscribe to the change feed



The new kid on the block

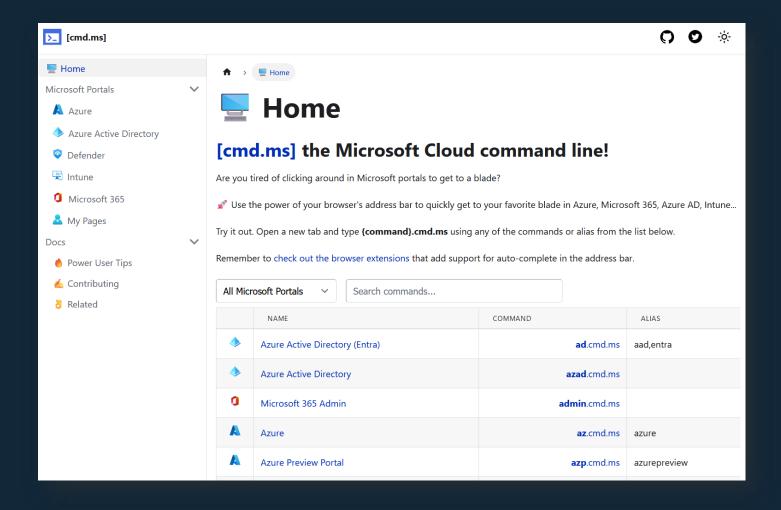
*.cloud.microsoft

Affects:

- Portals (https://admin.cloud.microsoft)
- Endpoints & web services (TBD)

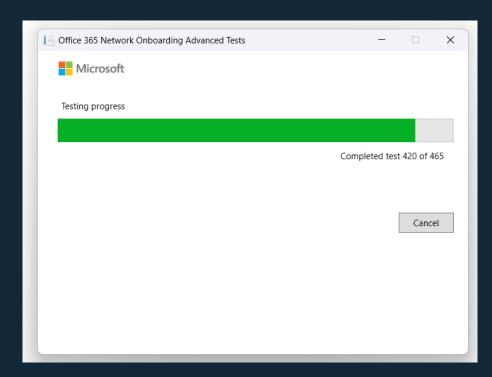
cmd.ms to the rescue!





Testing connectivity

Don't assume everything will just work https://connectivity.office.com



Testing connectivity

Network connectivity test results for your location Summary **Details** Here are the detailed connectivity test results for your location. Learn about the tests we run Your location information Result Your location Zoersel, Flemish Region, Belgium found by the web browser Network egress location (the location where your network connects to your ISP) Zoersel, Flemish Region, Belgium Your distance from the network egress location 3 miles (6 kilometers) ▲ Customers in your metropolitan area with better performance 41% of people in your area have a better network connection. Time to make a DNS request on your network 192.168.1.19 (42 ms) 192.168.1.9 (40 ms) Your distance from and/or time to connect to a DNS recursive resolver 162.158.232.184 (21 ms) If you use a proxy server, distance from your location and time to connect A proxy server was not identified in your connection Virtual private network (VPN) you use to connect to your organization No VPN detected

Unblock URL:

*.events.data.microsoft.com

Test FQDN(s) used were:

mobile.events.data.microsoft.com

Unblock URL:

*.aria.microsoft.com

Test FQDN(s) used were:

browser.pipe.aria.microsoft.com

Unblock URL:

c1.microsoft.com

Test FQDN(s) used were:

c1.microsoft.com

Unblock URL:

platform.linkedin.com

Test FQDN(s) used were:

platform.linkedin.com

Unblock URL:

crl.microsoft.com

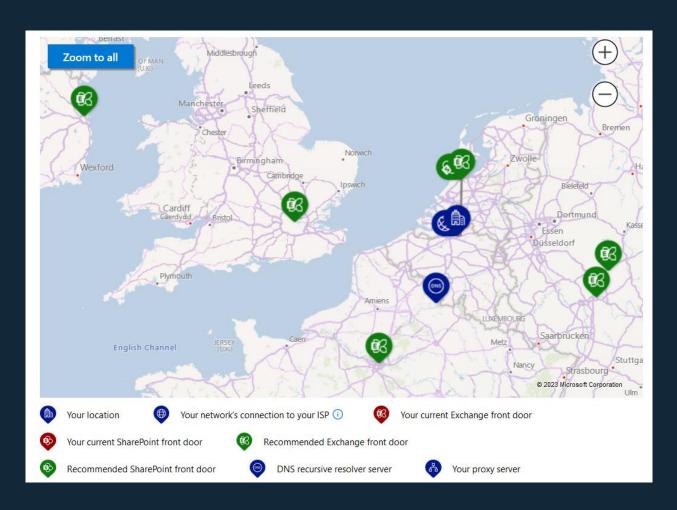
Test FQDN(s) used were:

crl.microsoft.com

Unblock URL:

*.office.net

Testing connectivity





Remote Connectivity Analyzer

https://testconnectivity.microsoft.com



DNSSEC and DANE Validation Test

This test will validate your domains DNSSEC and DANE configurations using the same DNS resolvers that Exchange Online uses to for outbound mail flow.



This test simulates the steps a mobile device uses to connect to an Exchange server using Exchange ActiveSync.



This test walks through the steps Outlook uses to connect from the internet. It tests connectivity using both the RPC over HTTP and the MAPI over HTTP protocols.

POP Email

This test walks through the steps an email client uses to connect to a mailbox using POP3.

Outlook Mobile Hybrid Modern Authentication Test

This test allows you to check if your on-premises Exchange environment is configured correctly to use Hybrid Modern Authentication (HMA) with Outlook for iOS and Android



Exchange Online Custom Domains DNS Connectivity Test

This test will check the external domain name settings for your verified domain in Office 365. The test will look for issues with mail delivery such as not receiving incoming email from the Internet and Outlook client connectivity issues that involve connecting to Outlook and Exchange

Synchronization, Notification, Availability, and Automatic Replies

These tests walk through many basic Exchange Web Services tasks to confirm they're working. This is useful for IT administrators who want to troubleshoot external access using Entourage EWS or other Web Services clients.

Inbound SMTP Email

This test walks through the steps an Internet email server uses to send inbound SMTP email to

IMAP Email

This test walks through the steps an email client uses to connect to a mailbox using IMAP4.

This test verifies for a given email address if a user mailbox, recipient or user object exists and if the object is provisioned in Azure AD and Exchange Online.



Teams DNS Connectivity Test

This test will check the external domain name settings for your custom domain user in Microsoft



This test verifies a service account's ability to access a specified mailbox, create and delete items in it, and access it via Exchange Impersonation. This test is primarily used by application developers to test the ability to access mailboxes with alternate credentials.

Outbound SMTP Email

This test checks your outbound IP address for certain requirements. This includes Reverse DNS. Sender ID, and RBL checks

This test verifies that a Microsoft 365 mailbox can access the free/busy information of an onpremises mailbox, and vice versa (one direction per test run).

Organizational settings & advanced deployment guides

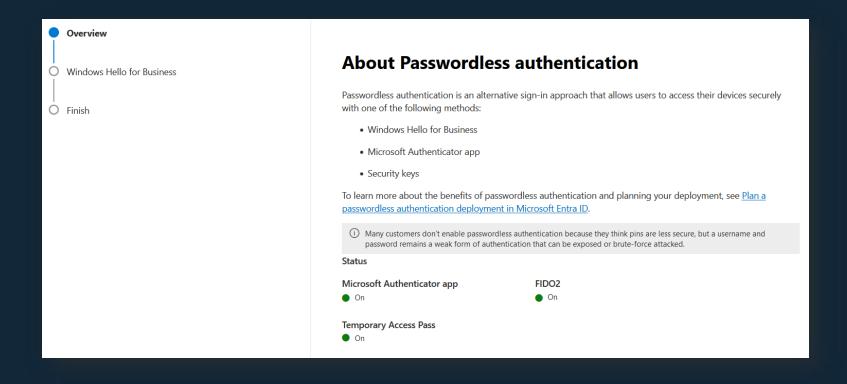
Organizational settings

- Central tenant and services settings
 - User consent to apps (set up an admin consent workflow)
 - Let users start trials on behalf of your organization
 - Let users auto-claim licenses
- Security & privacy settings
 - Control customer lockbox
 - Disable password expiration
 - Enable privileged access
 - Let users add guests to the organization
- Organization profile
 - Custom themes, tiles, helpdesk information, email notifications
 - Multitenant collaboration (preview)

Advanced deployment guides 💎



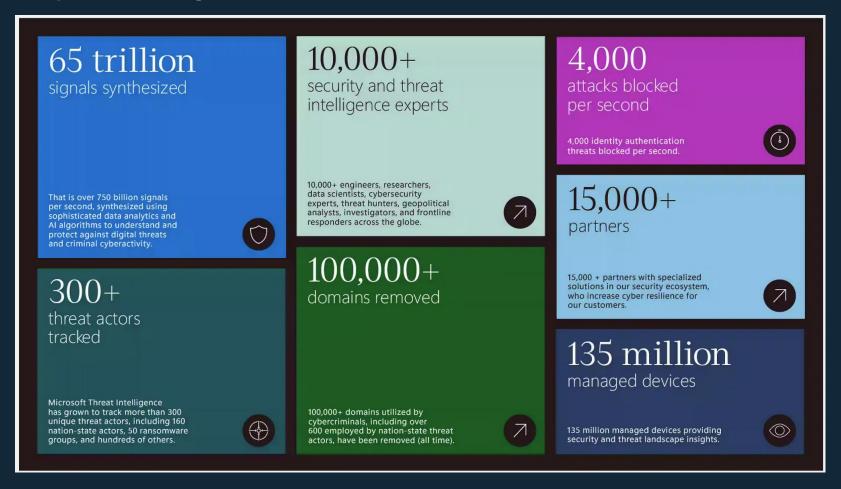
https://setup.microsoft.com

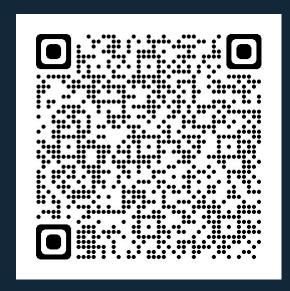


Security security!

Microsoft Digital Defense Report 2023

Required reading





How can we protect against 99% of attacks?

While we explore the many dimensions of the cyber threat landscape, there is one crucial point we must emphasize across them all: the vast majority of successful cyberattacks could be thwarted by implementing a few fundamental security hygiene practices.

By adhering to these minimum-security standards, it is possible to protect against over 99 percent of attacks:

- 1 Enable multifactor authentication (MFA):
 This protects against compromised user
 passwords and helps to provide extra
 resilience for identities.
- 2 Apply Zero Trust principles: The cornerstone of any resilience plan is to limit the impact of an attack on an organization. These principles are:
- Explicitly verify. Ensure users and devices are in a good state before allowing access to resources.
- Use least privilege access. Allow only the privilege that is needed for access to a resource and no more.

- Assume breach. Assume system defenses have been breached and systems may be compromised. This means constantly monitoring the environment for possible attack.
- 3 Use extended detection and response (XDR) and antimalware: Implement software to detect and automatically block attacks and provide insights to the security operations software. Monitoring insights from threat detection systems is essential to being able to respond to threats in a timely fashion.
- Weep up to date: Unpatched and outof-date systems are a key reason many organizations fall victim to an attack. Ensure all systems are kept up to date including firmware, the operating system, and applications.
- 5 Protect data: Knowing your important data, where it is located, and whether the right defenses are implemented is crucial to implementing the appropriate protection.

Hyperscale cloud makes it easier to implement fundamental security practices by either enabling them by default or abstracting the need for customers to implement them. With software-as-a-service (SaaS) and platform-as-a-service (PaaS) solutions, the cloud provider takes responsibility for keeping up with patch management.

Implementing security solutions like MFA or Zero Trust principles is simpler with hyperscale cloud because these capabilities are already built into the platform. Additionally, cloud-enabled capabilities like XDR and MFA are constantly updated with trillions of daily signals, providing dynamic protection that adjusts to the current threat landscape.

Fundamentals of cyber hygiene

99%

Basic security hygiene still protects against 99% of attacks.

How effective is MFA at deterring cyberattacks? A recent study based on real-world attack data from Microsoft Entra found that MFA reduces the risk of compromise by 99.2 percent.¹



Enable multifactor authentication (MFA)



Apply Zero Trust principles



Use extended detection and response (XDR) and antimalware



Keep up to date



Protect data

Outlier attacks on the bell curve make up just 1%

The State of Cybercrime

Key developments

Cybercriminals are leveraging the cybercrime-as-a-service ecosystem to launch phishing, identity, and distributed denial of service (DDoS) attacks at scale. Simultaneously, they are increasingly bypassing multifactor authentication and other security measures to conduct targeted attacks.

Ransomware operators are shifting heavily toward hands on keyboard attacks, using living-off-the-land techniques and remote encryption to conceal their tracks, and exfiltrating data to add pressure to their ransom demands. And cybercriminals are improving their ability to impersonate or compromise legitimate third parties, making it even harder for users to identify fraud until it's too late.

of all successful ransomware compromises originate through

Find out more on page 18

unmanaged devices.

A return on mitigation (ROM) framework is helpful for prioritization and may highlight actions requiring low effort or resources but that have a high impact.

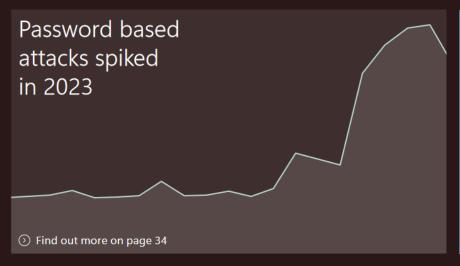
Find out more on page 41

70% of organizations encountering human-operated ransomware had fewer than 500 employees.

Find out more on page 18

Human-operated ransomware attacks are up more than 200%

Find out more on page 17



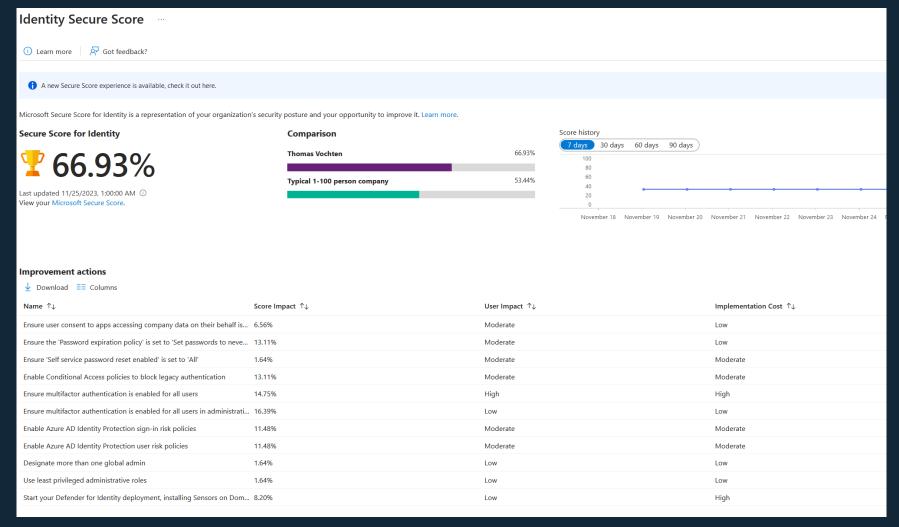
Last year marked a significant shift in cybercriminal tactics

with threat actors exploiting cloud computing resources such as virtual machines to launch DDoS attacks. When hundreds of millions of requests per second originating from tens of thousands of devices constitute an attack, the cloud is our best defense, due to the scale needed to mitigate the largest attacks.

Find out more on page 39



Where do I start?



Five Six steps to securing your identities

- 0) Protect privileged accounts with MFA
- 1) Strengthen your credentials
- 2) Reduce your attack surface area
- 3) Automate threat response
- 4) Utilize cloud intelligence
- 5) Enable end-user self-service

Step 0 - Protect accounts with MFA

- Whatever you do, do this first
- MFA will be mandatory soon
- Use conditional access policies or
- Security Defaults

Five steps to securing your identities

Authentication methods



We support a broad range of multifactor authentication options





Must use with Conditional Access policy requiring managed devices to get protection from external phishing threats.

Five steps to securing your identities

Security Defaults?

Preconfigured security settings

- MFA registration for all users
- MFA enforced for adminusers
- Protect privileged activities
- Blocks legacy AuthN



Keep your organization secure

Security defaults are a set of identity security settings recommended by Microsoft as protection against common identity-related attacks. Your organization is a good fit to be protected by security defaults.

What do I get

Stronger security by enabling multi-factor authentication (MFA).

What will change

Every now and then you will have to confirm your sign-in with a notification on your mobile phone.

in the upcoming days, you will be asked to register for MFA using the Microsoft Authenticator App. Make sure to keep the app installed and to register again when switching phones.

Learn more

Enable security defaults

From Security Defaults to Conditional Access

Security Defaults are just the bare minimum

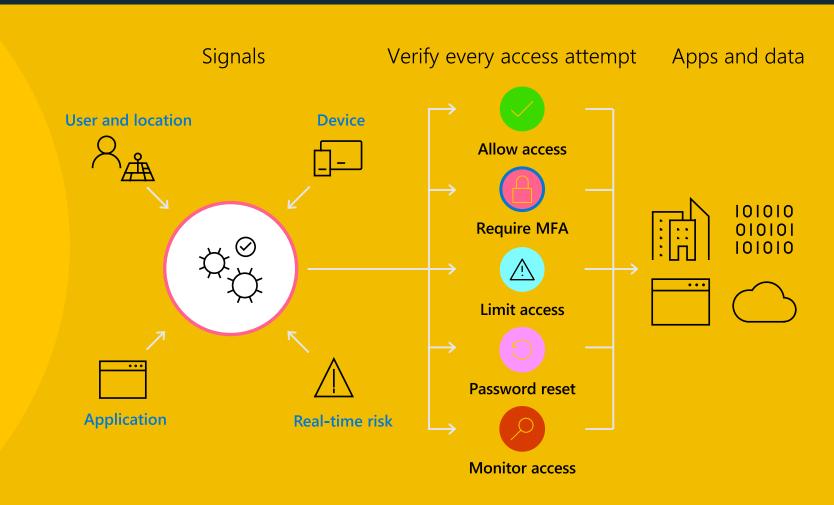
	Security defaults	Conditional Access
Required licenses	None	At least Microsoft Entra ID P1
Customization	No customization (on or off)	Fully customizable
Enabled by	Microsoft or administrator	Administrator
Complexity	Simple to use	Fully customizable based on your requirements

Five steps to securing your identities

Conditional Access



- Enforce access controls with adaptive policies
- Protect data inside applications
- Restrict access for vulnerable and compromised devices



Step 1 - Strengthen your credentials

- Enforce MFA for all users
- Rethink password complexity rules
 Microsoft Entra Password Protection provides (custom) banned password list

Users	Microsoft Entra Password Protection with global banned password list	Microsoft Entra Password Protection with custom banned password list
Cloud-only users	Microsoft Entra ID Free	Microsoft Entra ID P1 or P2
Users synchronized from on- premises AD DS	Microsoft Entra ID P1 or P2	Microsoft Entra ID P1 or P2

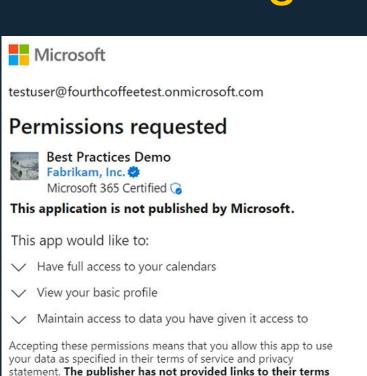
Rethink password expiration rules

Step 2 - Reduce your attack surface area

- Only allow strong cloud authentication
- Block legacy authentication (look at your sign-in logs)
- Block invalid authentication entry points (disable inactive accounts)
- Evaluate your admin roles, make sure they are cloud-only
- Implement Privilege Identity Management
- Restrict user consent operations

Five steps to securing your identities

Restricting user consent operations

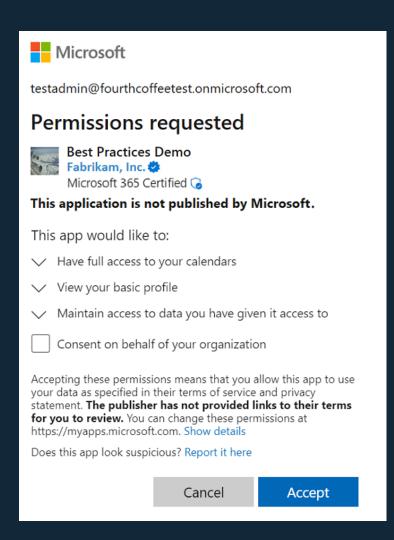


Microsoft

testuser@fourthcoffeetest.onmicrosoft.com

Need admin approval

Best Practices Demo
Fabrikam, Inc. Microsoft 365 Certified Microsoft 365 Ce



for you to review. You can change these permissions at

Cancel

Accept

https://myapps.microsoft.com. Show details

Does this app look suspicious? Report it here

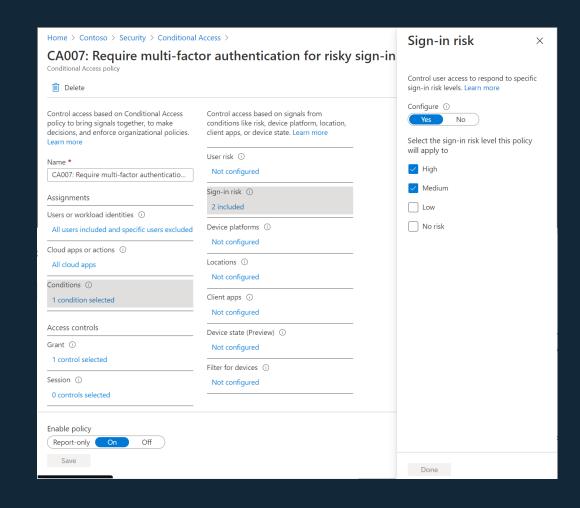
Privileged Identity Management

- Just-in-time administrative access
- History of administrator role activation and changes made
- Get alerts when something changes
- Approvals & justification
- Time-bound access
- Review membership



Step 3 - Automate threat response

- Implement sign-in risk
 policies (high/medium/low
 risk) with conditional
 access
- Implement user risk security policy
- Integrate Microsoft 365
 Defender with Microsoft
 Entra ID Protection

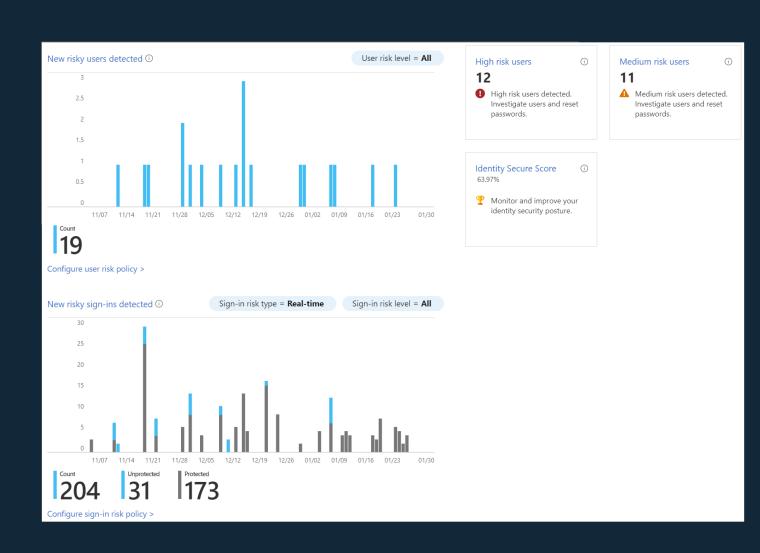


Step 4 - Utilize cloud intelligence

Setup monitoring and alerting for:

- Risky sign-ins
- Risky users

Audit apps and consented permissions



Step 5 - Enable end-user self-service

- Implement self-service password reset (SSPR)
- Implement self-service group and application access (look at entitlement management)
- Implement access reviews
- Implement automatic user provisioning

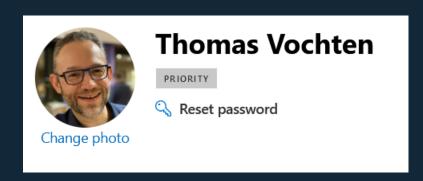
Break-glass accounts 💎

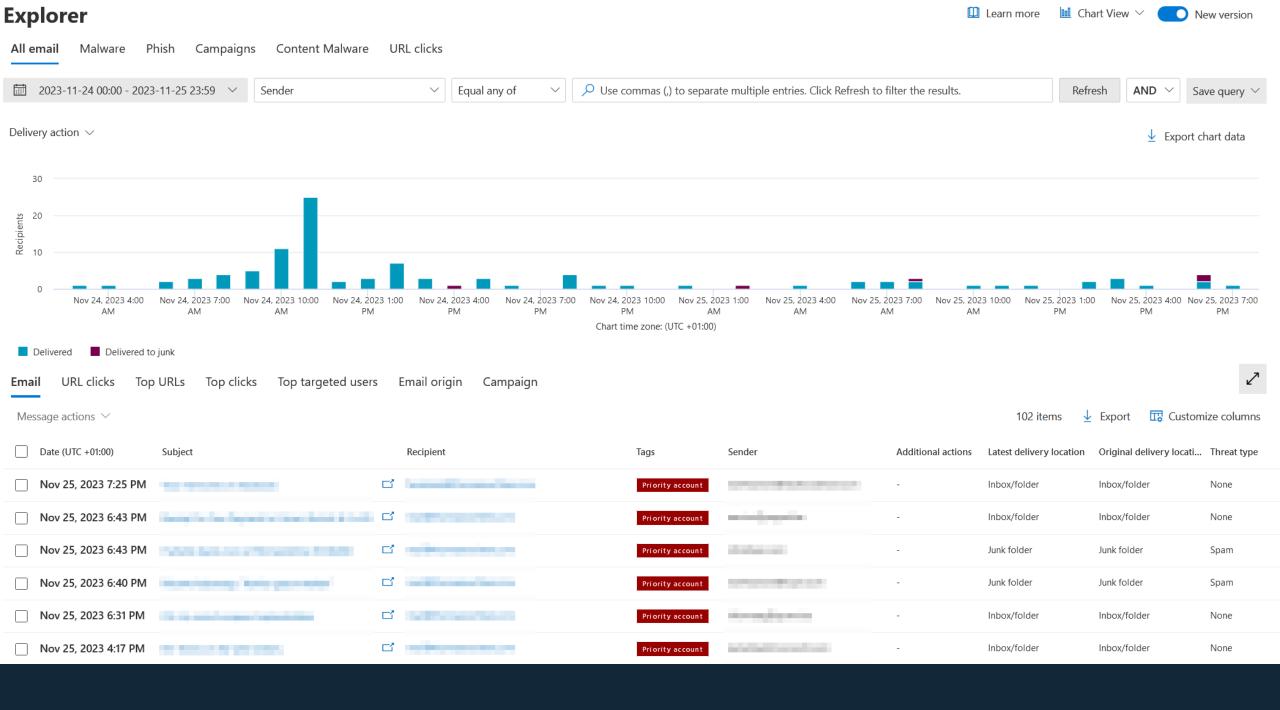
- Highly privileged (global administrator)
- Cloud-only account
- Not assigned to specific people (or devices, or phones)
- Should be locked away physically
- Monitor and audit its use
- Validate and test regularly

EXCLUDE FROM CONDITIONAL ACCESS POLICIES

Priority accounts protection •

- Reduce impact of VIP accounts being breached
- Additional detection heuristics and visibility in reporting





Impersonation Protection

Impersonation

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

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 (0)

Enable impersonation protection for these internal and external sender domains.

Manage 0 custom domain(s)

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

Takeaways

- Revisit the basics, such as data location
- Don't dismiss foundational technologies like DNS & networking
- Have a look at your organization settings regularly
- Multi-Geo & Multi-Tenant, but just because you can, doesn't mean you should
- MFA is a must, but it's just the start for security

Thank you

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Get the slides