



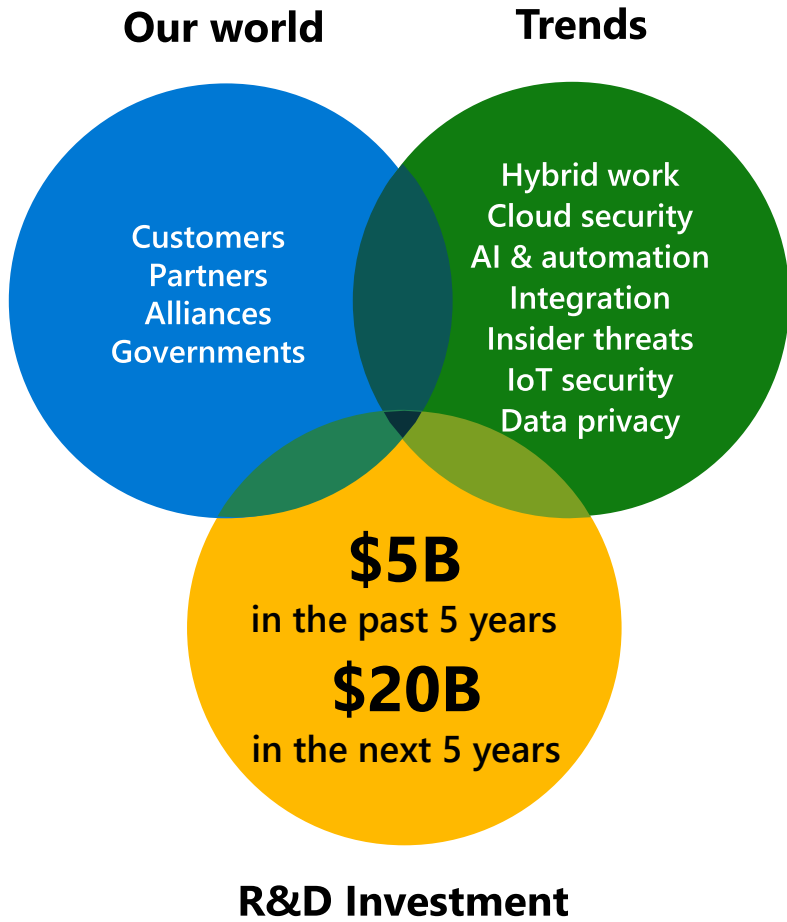
Microsoft Security

Building a safer world together

Dag Nyrud
Director – Security & Modern Work
Microsoft Norway

May 2023





*“Security is our top priority,
and we are committed to
working with others across
the industry to protect our
customers.”*

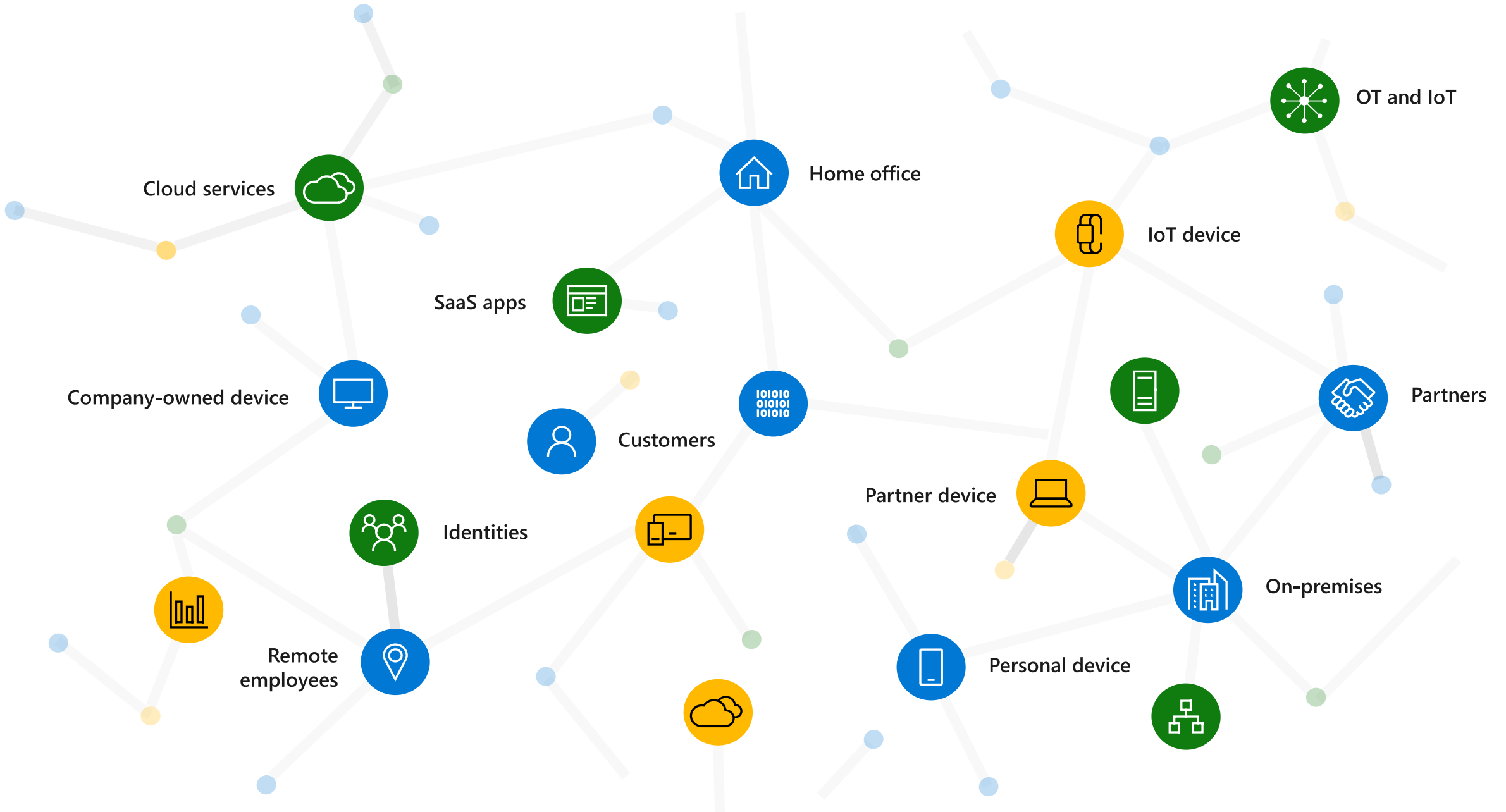
Satya Nadella
Chief Executive Officer, Microsoft
Corporation





**Security has never been
more critical**

**The technology
environment has never
been so complex**



Navigating a shifting world

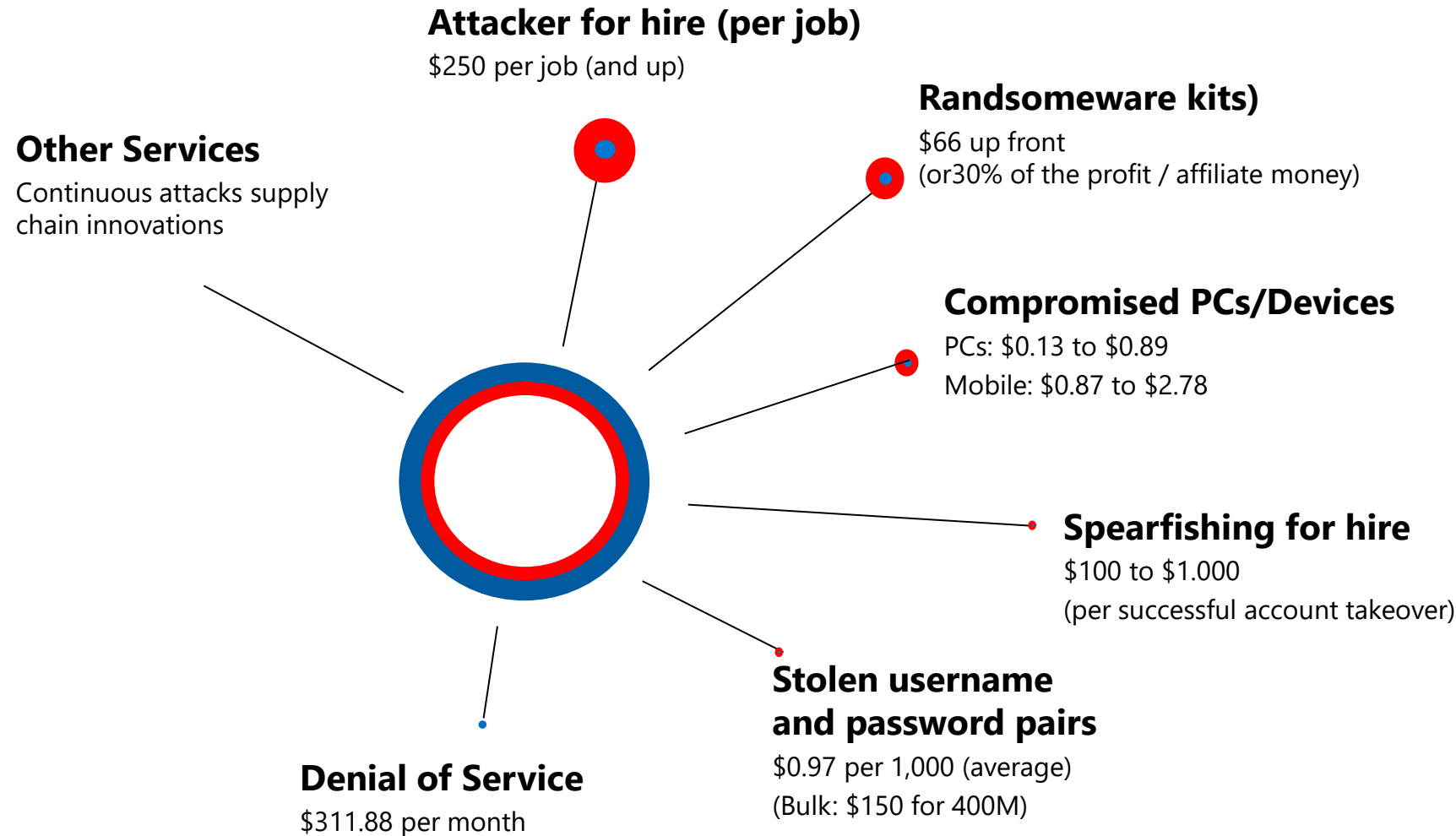
Conventional security tools
have not kept pace

Attacks growing
more sophisticated

Regulatory landscape
becoming **more complex**



The cybercrime economy and services



WITH NO TECHNICAL KNOWLEDGE OF HOW TO CONDUCT A CYBERCRIME ATTACK, AN AMATEUR THREAT ACTOR CAN PURCHASE A RANGE OF SERVICES TO CONDUCT THEIR ATTACKS WITH ONE CLICK.

100M

password attacks took
place globally everyday



in phishing attacks

Security Snapshot



Business Email Compromise

attempts detected and investigated by Microsoft Threat Intelligence Digital Crimes Unit (DCU) from April '22 to April '23

Cyber signals report – May 23:

Blogpost:

<https://aka.ms/CyberSignals4SecurityPost>

Insider article:

<https://aka.ms/CyberSignals-4>

35 Million

Annual

156,000

Daily

417,678

Phishing URL
Takedowns





Microsoft Digital Defense Report 2022

Illuminating the threat landscape
and empowering a digital defense.

[Aka.ms/MDDR](https://aka.ms/MDDR)

About our nation state data

Sample of nation state actors and their activities

Russia

No
NOBELIUM
IT, government, think tanks, higher education
APT29

Sr
STRONTIUM
Government, defense, think tanks, higher education
Fancy Bear

Sg
SEABORGIUM
Intelligence/ Defense personnel, think tanks
Callisto Group

Ir
IRIDIUM
Critical infrastructure, operational technology
Sandworm

Ac
ACTINIUM
Ukrainian government, military, law enforcement
Gamaredon

Br
BROMINE
Energy, aviation, critical manufacturing, defense industrial base
EnergeticBear

China

Ra
RADIUM
Government, education, defense

Ga
GALLIUM
Communications infrastructure, IT, government, education
SoftCell

Lebanon

Po
POLONIUM
Israeli defense industry, IT

Ni
NICKEL
Government, NGOs
APT15
Vixen Panda

Gd
GADOLINIUM
Telecommunications, NGOs, government
APT40

Iran

P
PHOSPHORUS
Media, human rights activists, politicians, and US transportation and energy
Charming Kitten

Bh
BOHRIUM
IT, shipping companies, Middle East governments
Tortoiseshell

North Korea

Pu
PLUTONIUM
Science and technology, defense, industrial
Andariel, Dark Seoul, Silent Chollima

Os
OSMIUM
Think tanks, academics, NGOs, government
Konni

Zn
ZINC
Government, defense, science and technology
Lazarus

Key

Symbol	Commonly targeted sectors
ACTIVITY GROUP	Industry references

Coordinated Russian cyber and military operations in Ukraine



April 19

IRIDIUM launches destructive attack on Lviv-based logistics provider



April 29

IRIDIUM conducts reconnaissance against transportation sector network in Lviv



May 3

Russian missiles strike railway substations, disrupting transport service



March 4

STRONTIUM targets government network in Vinnytsia



March 6

Russian forces launch eight missiles at Vinnytsia airport³



March 16

Russian rockets strike TV tower in Vinnytsia



February 14

Odessa-based critical infrastructure compromised by likely Russian actors



April 3

Russian airstrikes hit fuel depots and processing plants around Odessa



February 28

Threat actor compromises a Kyiv-based media company



March 1

Missile strikes Kyiv TV tower



March 1

Kyiv-based media companies face destructive attacks and data exfiltration



March 11

Dnipro government agency targeted with destructive implant



March 11

First direct Russian strikes hit Dnipro government buildings, among others



March 2

Russian group moves laterally on network of Ukrainian nuclear power company



March 3

Russia's military occupies Ukraine's largest nuclear power station



LEGEND



Cyber



Kinetic

Microsoft on the front lines

Protecting

860K organizations
in 120 countries

Analyzing

65T threat signals
every day

Tracking

250+ unique nation-states,
cybercriminals, and
other threat actors

Blocked

70B attacks
last year

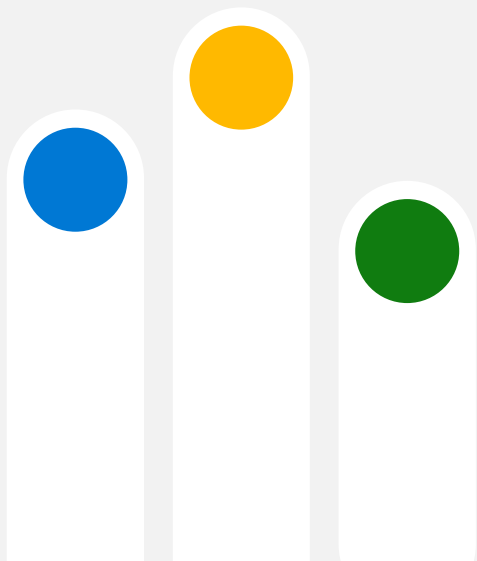


Microsoft Security helps you do more with less

Simplify Vendor Management

Reduce threats with AI and
Automation

Improve Operational Efficiency



Infrastructure Security

Network Firewall
Check Point, Cisco, Barracuda, Dell, SonicWall, Juniper, Hewlett Packard Enterprise, Hillstone, McAfee, Fortinet, Sangfor, Stormshield, AhnLab, Bluecat, Palo Alto, WatchGuard, Huawei, Sophos

Network Monitoring
Blue Coat, Cisco, Xixia, ProtectWise, NetScout, Juniper, DeepNines, Solarwinds, Giganon, Spiceworks, ForeScout, Bradford Networks, EMC, RSA, Riverbed

Intrusion Prevention Systems
IBM, Cisco, Corero, Sophos, Check Point, Palo Alto, Fortinet, DeepNines, Extreme Networks, Huawei, McAfee, FireEye, Juniper, Nsfocus, Radware, AflighT

Unified Threat Management
Fortinet, Juniper, Palo Alto, FireEye, Dell, Hillstone, Cisco, Check Point, WatchGuard, Clavister, Gateprotect, Sophos, Huawei, Endian, Barracuda, Stormshield

Endpoint Security

Endpoint Protection
McAfee, Cylance, LANDesk, Morphisec, ThreatTrack, Psafe, F-Secure, Kaspersky, Microsoft, Bitdefender, AVG, Confer, Trend Micro, Emsisoft, Webroot, Malwarebytes, Symantec

Endpoint Detection & Response
Red Canary, Tanium, Triumphant, Cyphort, ZoneFox, Morphick, Hexis, Certego, Ironium, Topspin, CounterTack, Guidance, LightCyber, Confer, Carbon Black, Cybereason, Lastline, Digital Guardian, Nexthink, Hexis, Endgame

Application Security

WAF & Application Security
Pentasecurity, Qualys, Sucuri, Alert Logic, SH-PE, Trustwave, Akamai, AIO Networks, Waratek, Nsfocus, Zenedge, Citrix, Ergon, SOHA, Denyall, Arxan, Fireblade, Netsparker, DBAppSec, Fortinet, Secworks, Barracuda, Radware, Positive Technologies, Imperva

Vulnerability Assessment
Bugcrowd, WhiteHat Security, Rapid7, Trustwave, Checkmarx, SRC:CLR, McAfee, Flexera, Hewlett Packard Enterprise, Core Security, Nccgroup, IBM, RandomStorm, Veracode, Cigital, Snyk, Outpost24, Qualys, Hackerone

Managed Security Service Provider

at&t, SOLUTIONARY, Verizon, Clone Systems, Trustwave, Optiv, Alert Logic, Symantec, IBM, CSC, Dell, SecureWorks, Nuspire, BT, MegaPath, Business Services, Wipro, CenturyLink, BAE Systems

Messaging Security

Proofpoint, Forcepoint, Microsoft, EdgeWave, FireEye, Cisco, Trustwave, Morphick, Symantec, Cloudmark, Gwava, WatchGuard, BAE Systems, Cyren, Spamina, Fortinet, McAfee, Appriver, Barracuda, Clearswift, Agari, Sophos, Trend Micro, Dell, Mimecast

Web Security

Blue Coat, Distil Networks, Cisco, Sophos, Trustwave, Cloudflare, SH-PE, Zscaler, Zenare, Appriver, ContentKeeper, Check Point, Easy Solutions, Barracuda, OpenDNS, FireEye, Cyren, Forcepoint, Webroot, Symantec, Trend Micro, Gwava, Iboss, Bluecat, Venafi, Spamina

IoT Security

Mocana, Cryptosoft, Bastille, Utimaco, Webroot, Endian, Argus, Rubicon, Riscure, ZingBox, Anilou, Cyberbit, Securithings, ARM, Bayshore, Device Authority, Icon Labs, Cloudwear, Infineon, IOActive

Security Operations & Incident Response

SIEM
IBM, LogRhythm, Logentrics, EventTracker, EIO, Splunk, Alert Logic, Tenable, EMC, RSA, Alien Vault, Huntsman, Sumologic, NetIQ, Skybox, Tibco, Trustwave, Logscape, NetworkMinistry, Accelops, Corelog, Fluency, BlackStratus, Logpoint, Solarwinds

Security Incident Response
PhantomCyber, Hexadite, Invotas, Skybox, Proofpoint, Resilient, Cyberation, Baytheon, Foreground Security, Oqlabs, Ayehu, Click, CyberTriage, Rapid7, Nuix, Demisto, Guidance, Paladion, Security, Experts, Cyberbat, CyberResponse, Hexis, Swimlane

Threat Intelligence

BrightPoint, DomainTools, Threat Connect, Anomali, Verisign, Farsight Security, iSight Partners, Phishlabs, ZeroFox, SenseCy, RiskIQ, Recorded Future, ThreatMetrix, Blueliv, Malwarepatrol, OpenDNS, Flashpoint, Digital Shadows, Survela, Surfwatch, Looking Glass, CrowdStrike, Securonix, Bluecat, Proofpoint, ThreatQuotient

Mobile Security

Lookout, MobileIron, App Dome, Wandera, Mocana, Airwatch, Nuro, Silent Circle, InAuth, TigerText, Check Point, Better, LaunchKey, SnoopWall, Kaspersky, AVG, Trustlook, Vkey, Fortinet, Trend Micro, Koollspan, Apphority, AflighT, Optiolabs, Koolspan, Apthority, NovSecure, BlackBerry, PinDrop, Psafe, Zimperium, Sophos

Data Security

Hewlett Packard Enterprise, Vormetric, Harvest.ai, Nuro, Thinair, VERA, Emsisoft, Microsoft, Ironic Security, Networks, Wickr, Privitar, BlueTalon, GlobalVelocity, WinMagic, Somansa, CipherCloud, IdentityTinder, Dixa, Robustix

Transaction Security

Feedzai, Cardinal Commerce, Ethoca, Forter, Sift Science, Early Warning, Riskified, ThreatMetrix, Acculynk, Iovation, Data Security, Kount, Brighterion, Socure, IdenTrust, Brighterion, AU1, TIX, Signifyd, MaxMind, Guardian Analytics

Specialized Threat Analysis & Protection

IronNet Cybersecurity, Fortscale, Bay Dynamics, Invincea, TrapX Security, Exabeam, LightCyber, Damballa, Nvision, VECTRA, SS8, Imvision, Mobile System, Avecto, Cymmetria, AREA 1, Palantir, Sqrl, PreAlert, Niarra, Networks, ProtectWise, Fireglass, Utimaco, DeepInstinct, Securonix, Spikes, Redowl, Seculert, DarkTrace, Novetta, Esentire, Illusive, Menlo Security, Cyphort, Gurukul, Ionic Security

Identity & Access Management

Covisint, Clef Labs, Nok Nok, Oracle, PingIdentity, Courion, EMC, RSA, Cloudway, Imprivat, Bitium, Okta, SaferPass, SailPoint, Forgerock, Ca, Anasap, Microsoft, Onelogin, Trulioo, BeyondTrust, Simeio, Secure Key, Auth0, DeepIdentity, ID.me, Device Authority, Duo Security, Avecto, Exostar, Welcome, Verato, Tascent, SecureAuth, LaunchKey, Iantus, Thycotic, Pirean, Janrain, Gemalto, Cyberark, Centrify

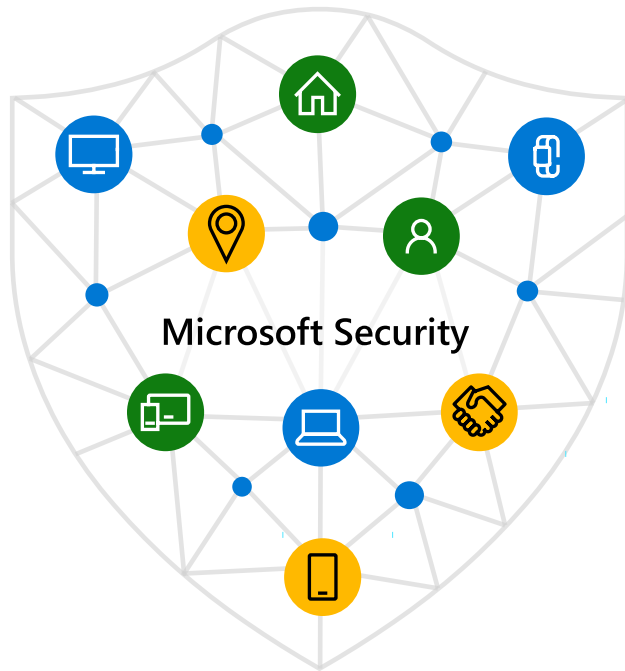
Cloud Security

Illumio, CloudPassage, Bitglass, Elicia, Panda, Adallom, BfBracket, Encrypted Cloud, Zscaler, Evident.io, ManagedMethods, Code42, WhiteHat, SOHA, Cloudway, Covata, Threat Stack, Vaultive, Harvest.ai, CloudLock, FireLayers, HyTrust, FortifyCloud, CATO, Dome9, Guardtime, Twistlock, ClearData, Qualys, VArmour, Skyhigh, Netskope, BetterCloud, Bascryptor, Blue Coat, VERA, CipherCloud

Risk & Compliance

RedSeal, Firemon, Anlianca, R-sam, Prevalent, Kenna, IBM, SecurityScorecard, MetricStream, RSA, Archer, Cytelegic, Brinqa, Paladion, Bitsight, Tufin

Simplify vendor management



Replace up to

50

product categories

Up to

60%

savings with Microsoft 365 E5
Security and Microsoft 365 E5
Compliance¹

\$0

built in Cloud Security
Posture Management with
Microsoft Defender for
Cloud

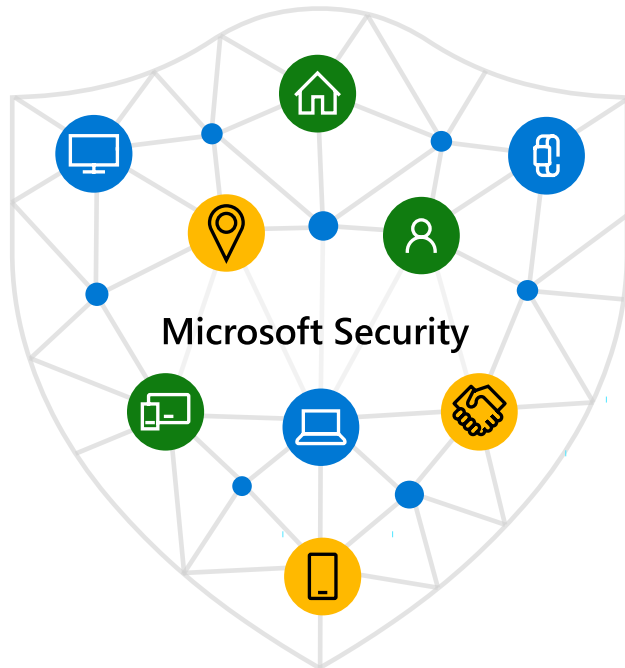
30%

savings from unifying cloud
security tools with Microsoft
Defender for Cloud²

¹ Savings based on publicly available estimated pricing for other vendor solutions and Web Direct/Base Price shown for Microsoft offerings

² Forrester Consulting, "The Total Economic Impact™ Of Microsoft Azure Security Center," June, 2021, commissioned by Microsoft

Reduce threats with AI and Automation



60%

reduced risk of material breach

65%

less time to investigate threats

88%

less time responding to threats with Microsoft Sentinel, Microsoft 365 Defender, and Microsoft Defender for Cloud¹

\$10.5

million additional end user productivity from automation and process improvements in Microsoft 365 Defender²

96%

less time spent monitoring potential suspicious activity with Microsoft Purview³

90%

reduction in noise, elevating the most critical issues with Microsoft Sentinel⁴

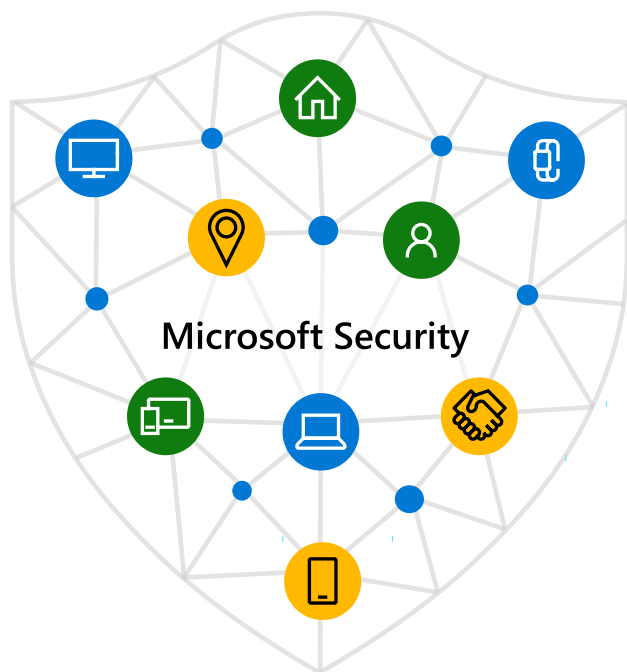
¹ Forrester Consulting, "The Total Economic Impact™ Of Microsoft SIEM and XDR", August 2022, commissioned by Microsoft

² Forrester Consulting, "The Total Economic Impact™ Of Microsoft 365 Defender", April 2022, commissioned by Microsoft

³ Forrester Consulting, "The Total Economic Impact™ Of Microsoft 365 E5 Compliance," February, 2021, commissioned by Microsoft

⁴ [Microsoft blog: Azure Sentinel uncovers the real threats hidden in billions of low fidelity signals, Feb 2020](#)

Improve Operational Efficiency



67%

reduced time to
deployment with
Microsoft Sentinel¹

73%

improved efficiency of network-
related IT work with Azure
Network Security²

75%

reduction in password
requests after introducing
Self-service Single-Sign-
On (SSO) with
Azure Active Directory³

\$479k

in human capital freed up by
redeploying IT time with
Microsoft Endpoint
Manager⁴

¹ Forrester Consulting, "The Total Economic Impact™ Of Microsoft Azure Sentinel," November, 2020, commissioned by Microsoft

² Forrester Consulting, "The Total Economic Impact™ Of Microsoft Azure Network Security" May, 2021, commissioned by Microsoft

³ Forrester Consulting, "The Total Economic Impact™ Of Zero Trust Solutions From Microsoft", December 2021, commissioned by Microsoft

⁴ Forrester Consulting, "The Total Economic Impact™ Of Microsoft Endpoint Manager," April 2021, commissioned by Microsoft

A leader in security, compliance, identity, & management



A Leader in six
Gartner® Magic
Quadrant™ reports



A Leader in eight
Forrester Wave™ categories



A Leader in seven
IDC MarketScape reports

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[IDC MarketScape: Worldwide Modern Endpoint Security for Enterprises 2021 Vendor Assessment, Doc #US48306021, November 2021](#)
[IDC MarketScape: Worldwide Modern Endpoint Security for Small and Midsize Businesses 2021 Vendor Assessment, Doc #48304721, November 2021](#)
[IDC MarketScape: Worldwide Advanced Authentication for Identity Security 2021 Vendor Assessment, Doc #US46178720, July 2021](#)
[IDC MarketScape: Worldwide eDiscovery Early Case Assessment Software 2022 Vendor Assessment, Doc #US48970222, October 2022](#)

[IDC MarketScape: Worldwide Unified Endpoint Management Software 2022 Vendor Assessment](#)
[IDC MarketScape: Worldwide Unified Endpoint Management Software for Small and Medium-Sized Businesses 2022 Vendor Assessment](#)
[IDC MarketScape: Worldwide Unified Endpoint Management Software for Ruggedized/Internet of Things Deployment 2022 Vendor Assessment](#)

Your enhanced security team



Protection aligned to what's ahead

Solutions to support your digital journey



Defend against
threats with SIEM
plus XDR



Secure
multicloud
environments



Secure identities
and access



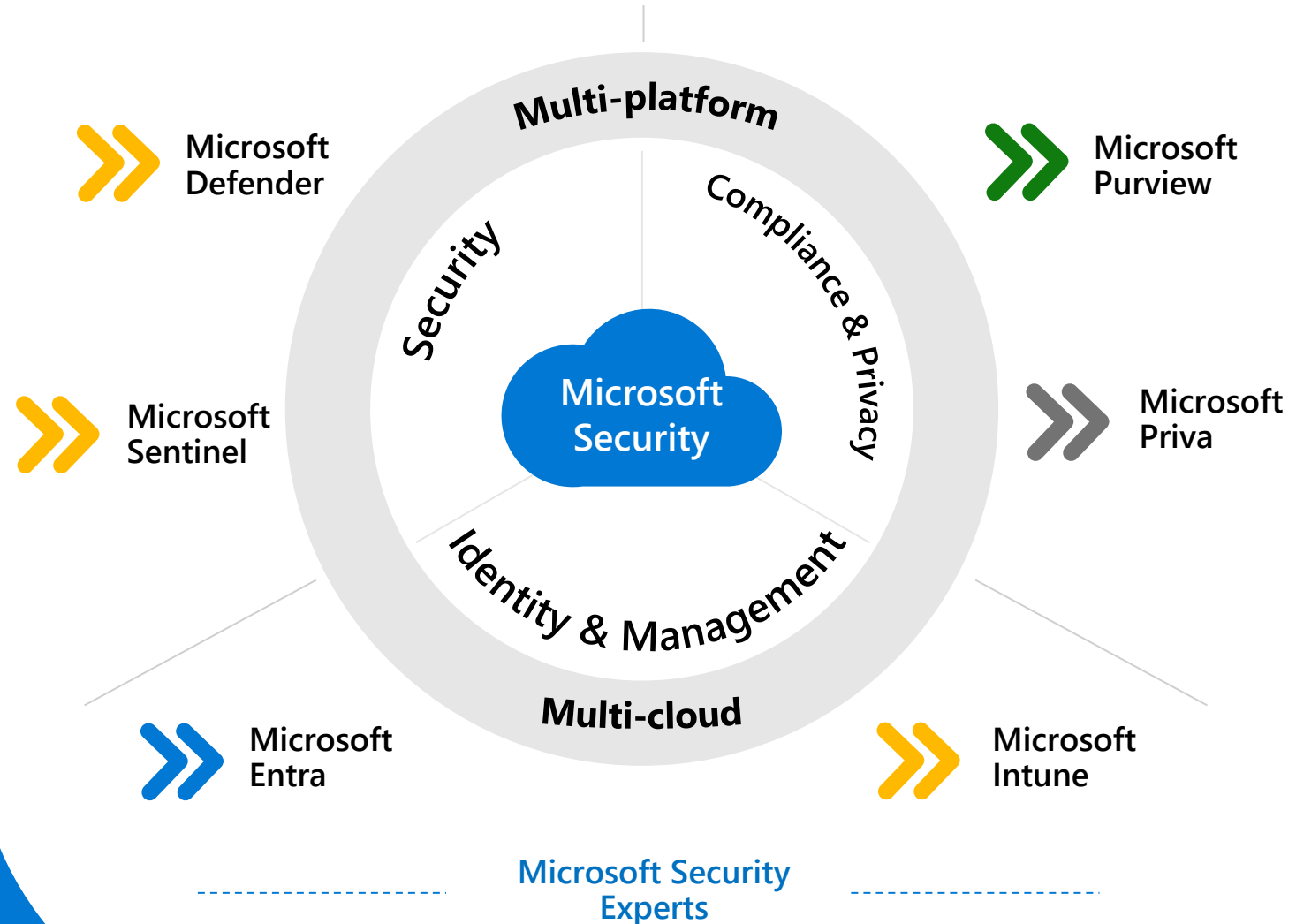
Protect and
govern sensitive
data



Mitigate
compliance and
privacy risk

Portfolio overview

Six product families integrating over 50 product categories



Security Operations / SOC

Threat Experts | Detection and Response Team (DART) | MSSP/MDR

Microsoft Sentinel – Cloud Native SIEM, SOAR, and UEBA for IT, OT, and IoT

Microsoft Defender – Extended Detection and Response (XDR)
Advanced Detection & Remediation | Automated Investigation & Remediation | Advanced Threat Hunting

Cloud Azure, AWS, GCP, On Premises & other 3 rd party clouds	Endpoint & Server/VM	Office 365 Email and Apps	Identity Cloud & On-Premises	SaaS Cloud Apps	+ More OT, IoT, SQL, and more
---	---------------------------------	-------------------------------------	--	---------------------------	---

Other Tools, Logs, & Data Sources



Cybersecurity Reference Architecture

Security modernization with Zero Trust Principles

December 2021 – <https://aka.ms/MCRA>

This is interactive!

1. Present Slide
2. Hover for Description
3. Click for more information

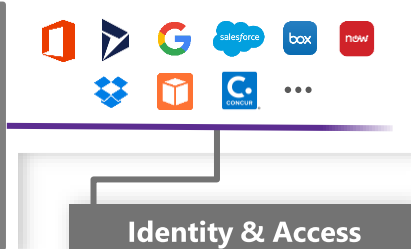
Security Guidance

1. [Security Documentation](#)
2. [Microsoft Best Practices](#)
3. Azure Security [Top 10 | Benchmarks](#) | [CAF](#) | [WAF](#)

Software as a Service (SaaS)

Microsoft Defender for Cloud Apps

- App Discovery & Risk Scoring (Shadow IT)
- Threat Detection & Response
- Policy Audit & Enforcement
- Session monitoring & control
- Information Protection & Data Loss Prevention (DLP)



Identity & Access

Conditional Access – Zero Trust Access Control decisions based on explicit validation of user trust and endpoint integrity

Endpoints & Devices

Microsoft Endpoint Manager
Unified Endpoint Management (UEM)

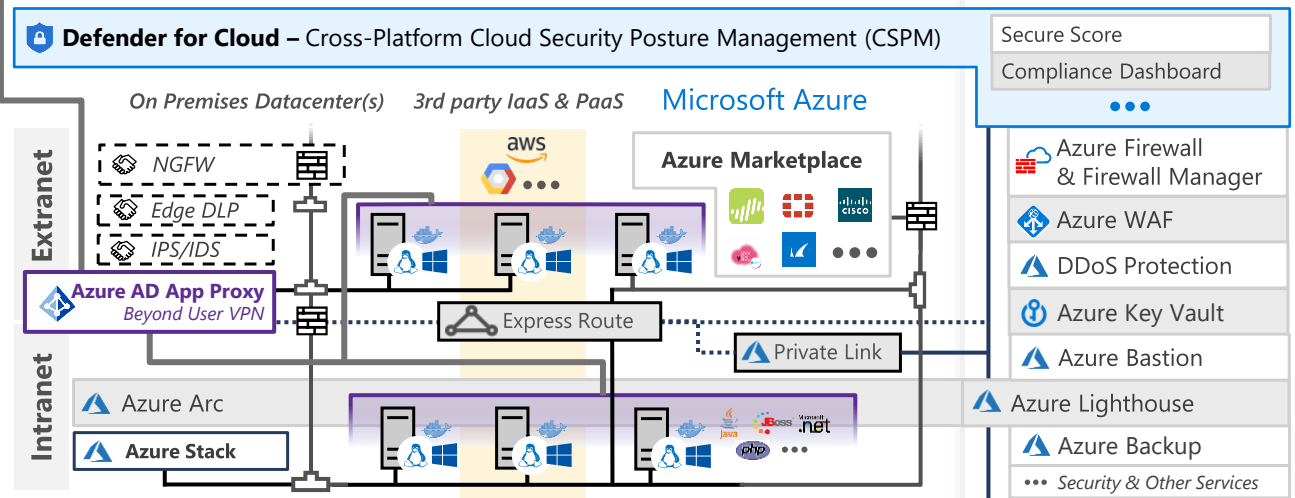
Intune | Configuration Manager



Microsoft Defender for Endpoint
Unified Endpoint Security

- Endpoint Detection & Response (EDR)
- Web Content Filtering
- Threat & Vuln Management
- Endpoint Data Loss Protection (DLP)

Hybrid Infrastructure – IaaS, PaaS, On-Premises



Information Protection

Azure Purview

Microsoft Information Protection (MIP)

Monitor → Discover → Classify → Protect

File Scanner
(on-premises and cloud)

Compliance Manager

Azure Active Directory

Passwordless & MFA

- Hello for Business
- Authenticator App
- FIDO2 Keys
- Identity Protection
Leaked cred protection
Behavioral Analytics
- Azure AD PIM
- Identity Governance
- Azure AD [B2B](#) & [B2C](#)

Defender for Identity

Active Directory

Securing Privileged Access – Secure Accounts, Devices, Intermediaries, and interfaces to enable and protect privileged users

Privileged Access Workstations (PAWs) – Secure workstations for administrators, developers, and other sensitive users

Microsoft Secure Score – Measure your security posture, and plan/prioritize rapid improvement with included guidance

Microsoft Compliance Score – Prioritize, measure, and plan improvement actions against controls

Windows 10 & 11 Security

- Network protection
- Credential protection
- Full Disk Encryption
- Attack surface reduction
- App control
- Exploit protection
- Behavior monitoring
- Next-generation protection

IoT and Operational Technology (OT)

Azure Sphere

Microsoft Defender for IoT

- ICS, SCADA, OT
- Internet of Things (IoT)
- Industrial IoT (IIoT)
- Asset & Vulnerability management
- Threat Detection & Response

Defender for Cloud – Cross-Platform, Cross-Cloud XDR

Multi-asset detection and response for infrastructure and platform as a service (IaaS & PaaS), Proactive Threat defenses

People Security

- Attack Simulator
- Insider Risk Management
- Communication Compliance

GitHub Advanced Security – Secure development and software supply chain

Threat Intelligence – 8+ Trillion signals per day of security context

Service Trust Portal – How Microsoft secures cloud services

Security Development Lifecycle (SDL)

Control at scale

Security

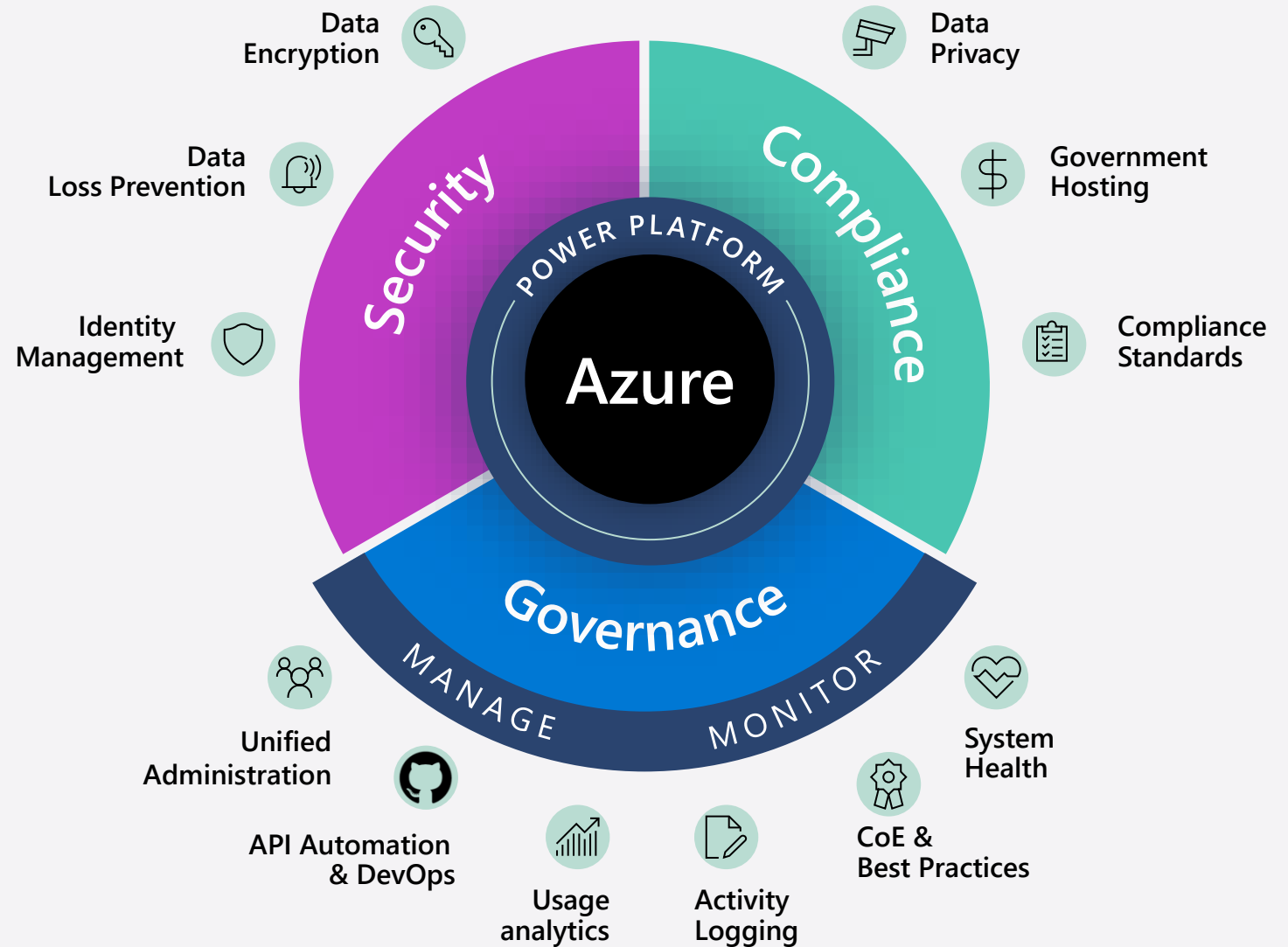
20B+ USD investment in security R&D and 3,500 cyber security experts

Compliance

Hosted in Azure and globally available with 90+ compliance offerings including CIS Benchmark, CSA STAR Self-Assessment, SOC 1 Type 2.

Governance

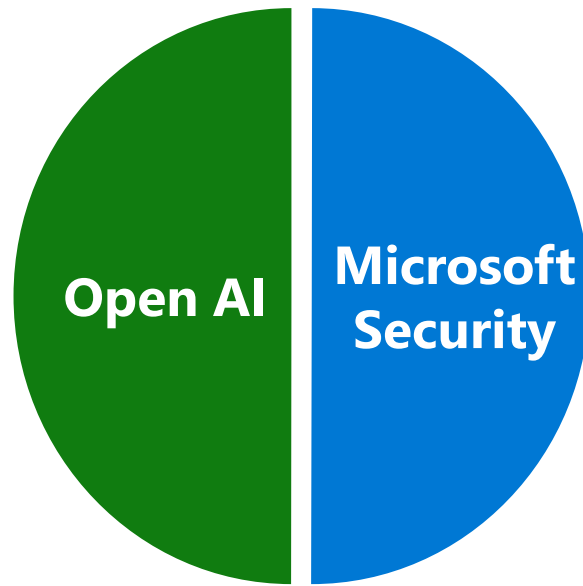
Enterprise scale governance capabilities native part of the platform



Microsoft Security Copilot

Briefing





**Most
advanced
general
models**

Open AI

**Microsoft
Security**

**Hyperscale
AI
infrastructure**

**Cyber-
trained
model**

**Evergreen
threat
intelligence**

**Cyber
skills +
promptbooks**



Announcing

Microsoft Security Copilot

Calls to action for cyber resilience

Resilience success factors every organization should adopt

The cyber resilience bell curve

98%

Basic security hygiene still protects against 98% of attacks



-  Enable multifactor authentication
-  Apply Zero Trust principles
-  Use modern anti-malware
-  Keep up to date
-  Protect data

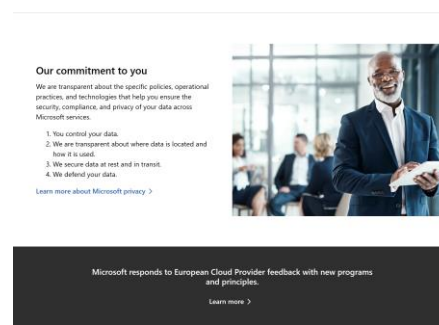
More information



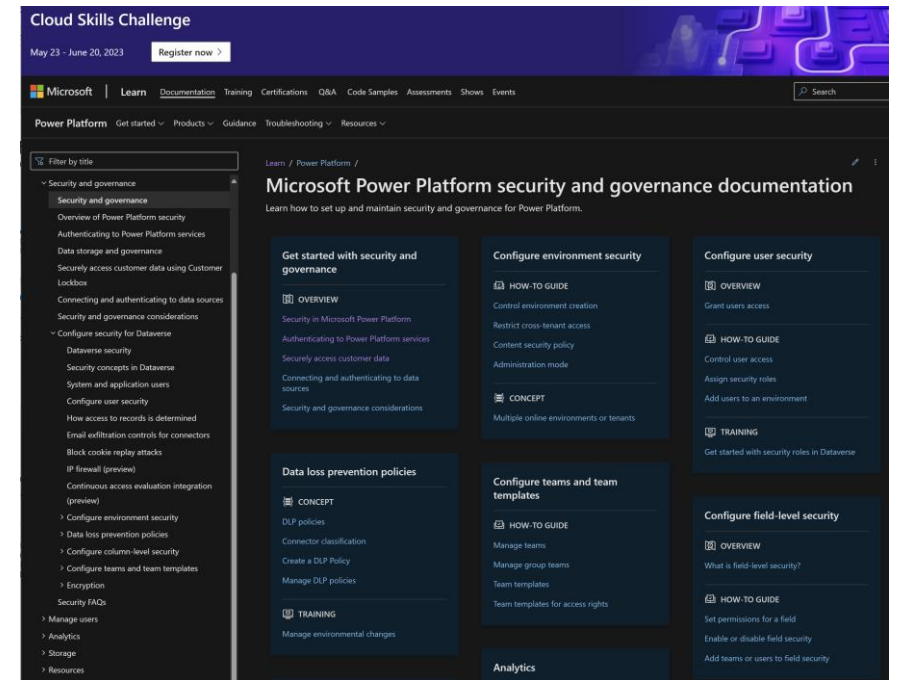
aka.ms/security



[Security Copilot blog](https://aka.ms/securitycopilo)
aka.ms/securitycopilo
Watch the Secure event
keynote



aka.ms/trustcenter

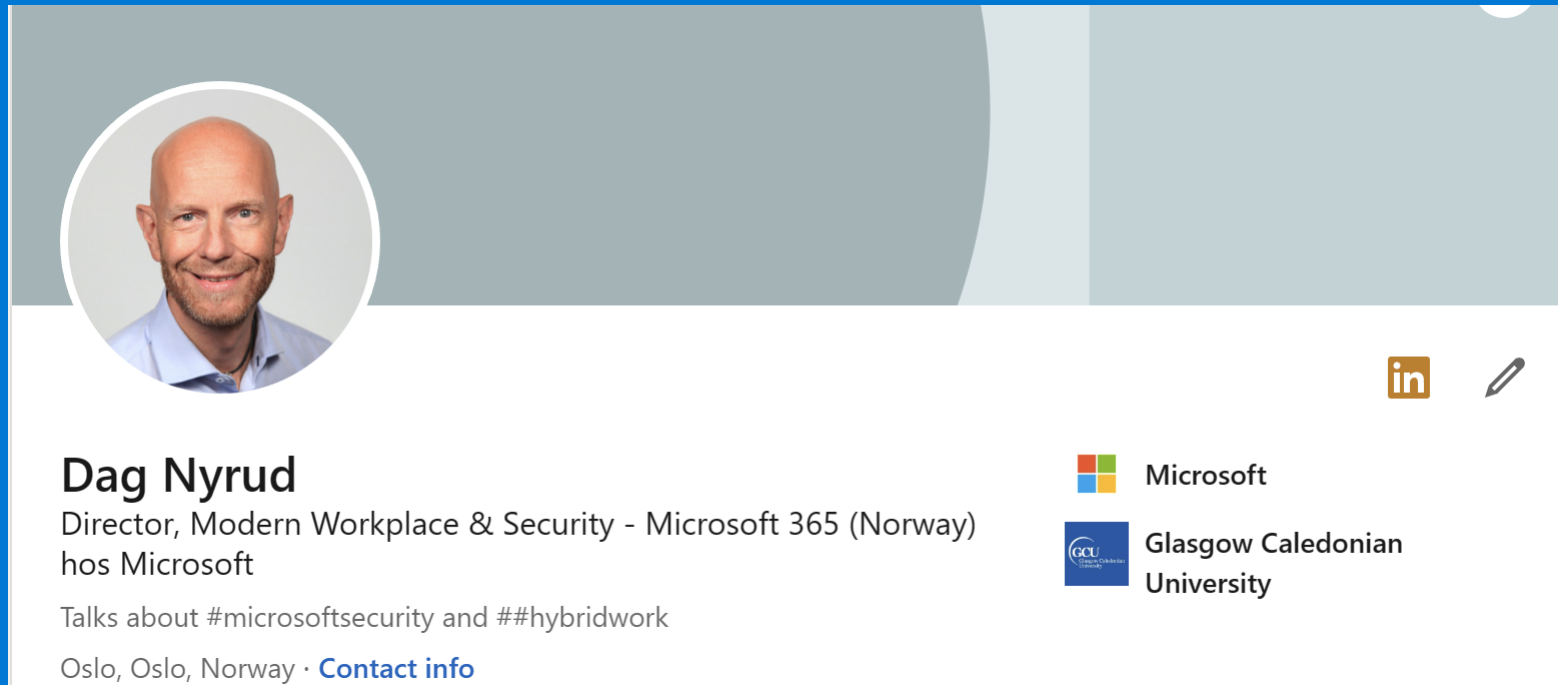


learn.microsoft.com

or

<https://learn.microsoft.com/en-us/power-platform/admin/security>

Tusen takk!



A screenshot of a LinkedIn profile card for Dag Nyrud. The card features a circular profile picture of a man with a beard and a light blue shirt. Below the picture, the name "Dag Nyrud" is displayed in bold, followed by his title "Director, Modern Workplace & Security - Microsoft 365 (Norway) hos Microsoft". A short bio mentions "#microsoftsecurity" and "##hybridwork". The location is listed as "Oslo, Oslo, Norway" with a "Contact info" link. To the right, there are logos for Microsoft and Glasgow Caledonian University, along with a LinkedIn icon and a pencil icon for editing.

Dag Nyrud
Director, Modern Workplace & Security - Microsoft 365 (Norway)
hos Microsoft

Talks about #microsoftsecurity and ##hybridwork

Oslo, Oslo, Norway · [Contact info](#)

Microsoft
Glasgow Caledonian University



<https://www.linkedin.com/in/dagnyrud/>