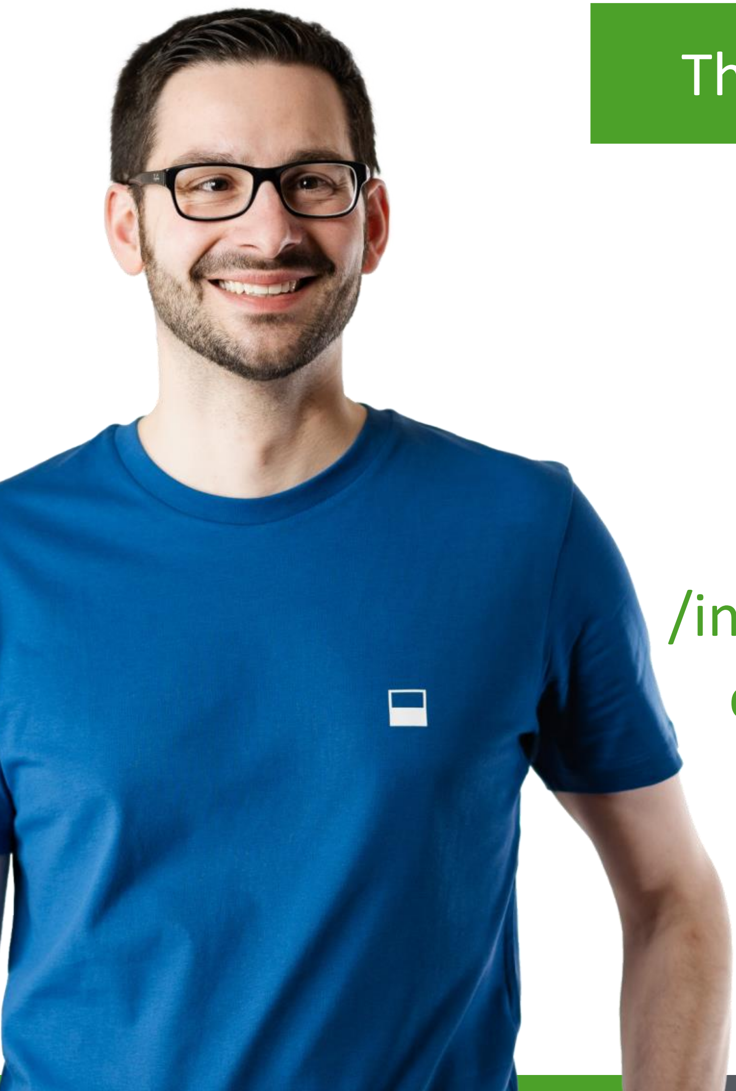
Zero Trust - Zero Gap? Spotlight on (new) uncovered aspects of your CA design

Christopher Brumm and Thomas Naunheim

Workplace Ninja Summit 2024

About us...



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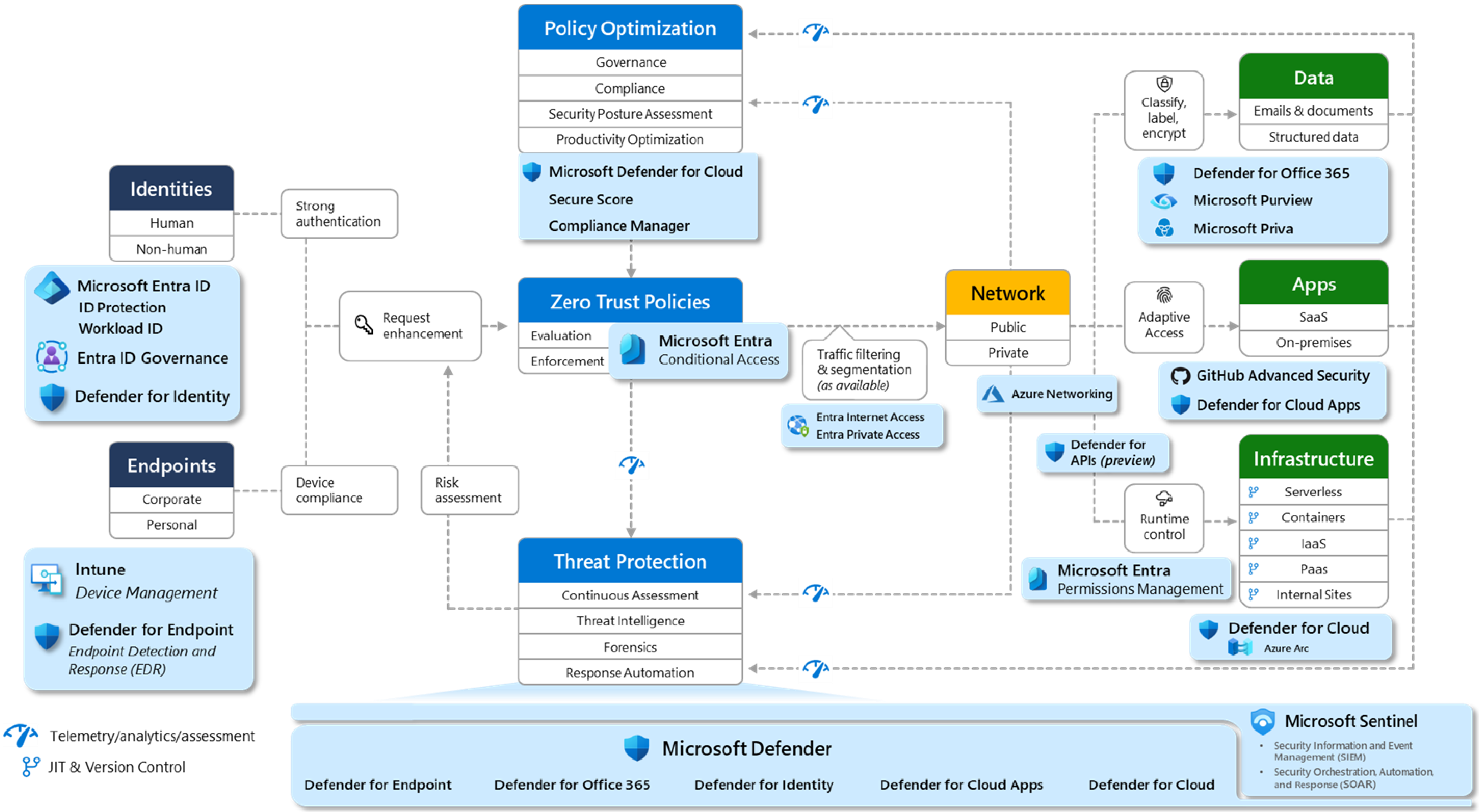

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Security Posture Assessment
Productivity Optimization

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Secure Score
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Strong authentication

Request enhancement

Zero Trust Policies
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Enforcement

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Traffic filtering & segmentation *(as available)*

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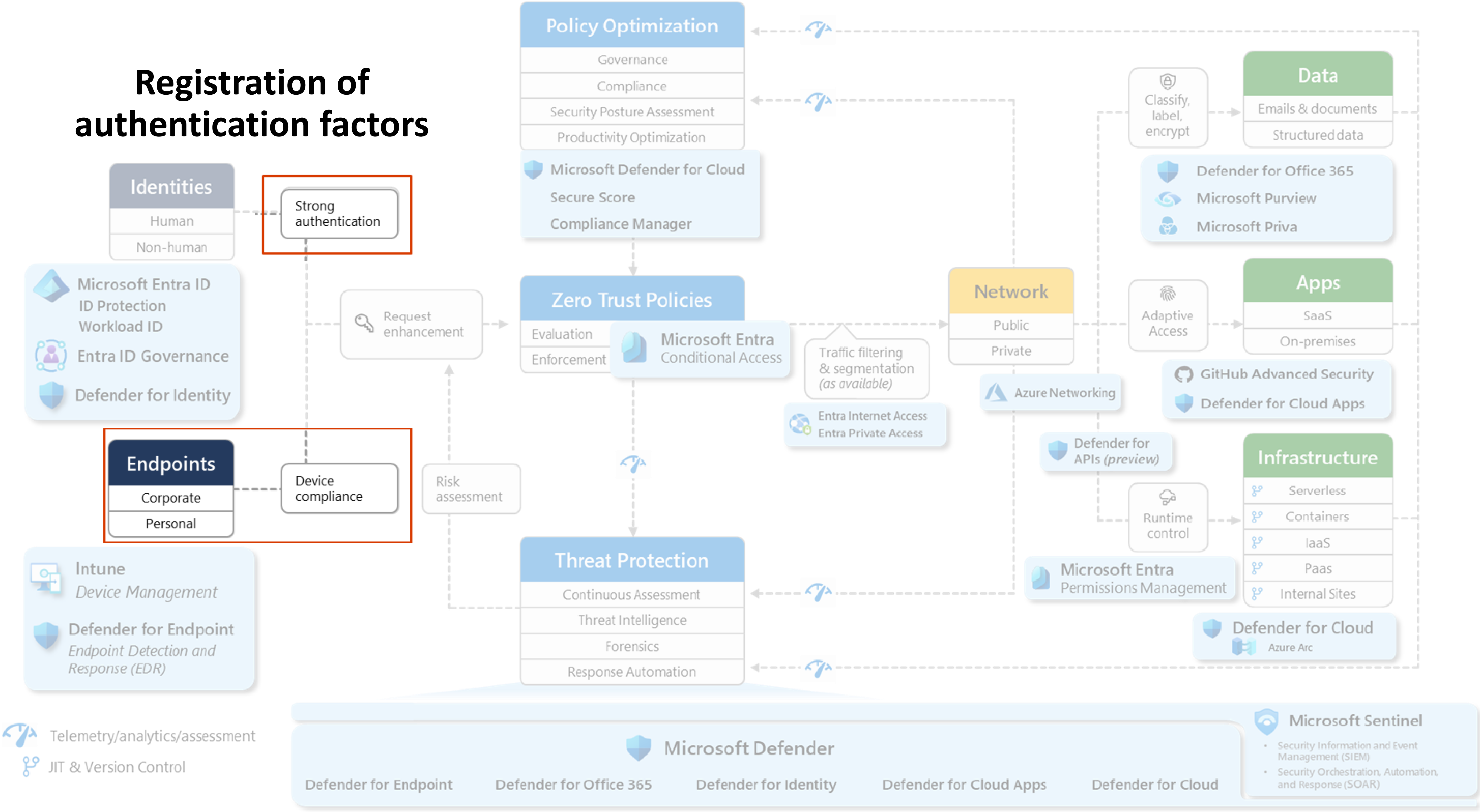
Source: Microsoft Cybersecurity Reference Architectures (MCRA) | Microsoft Learn

Registration of authentication factors



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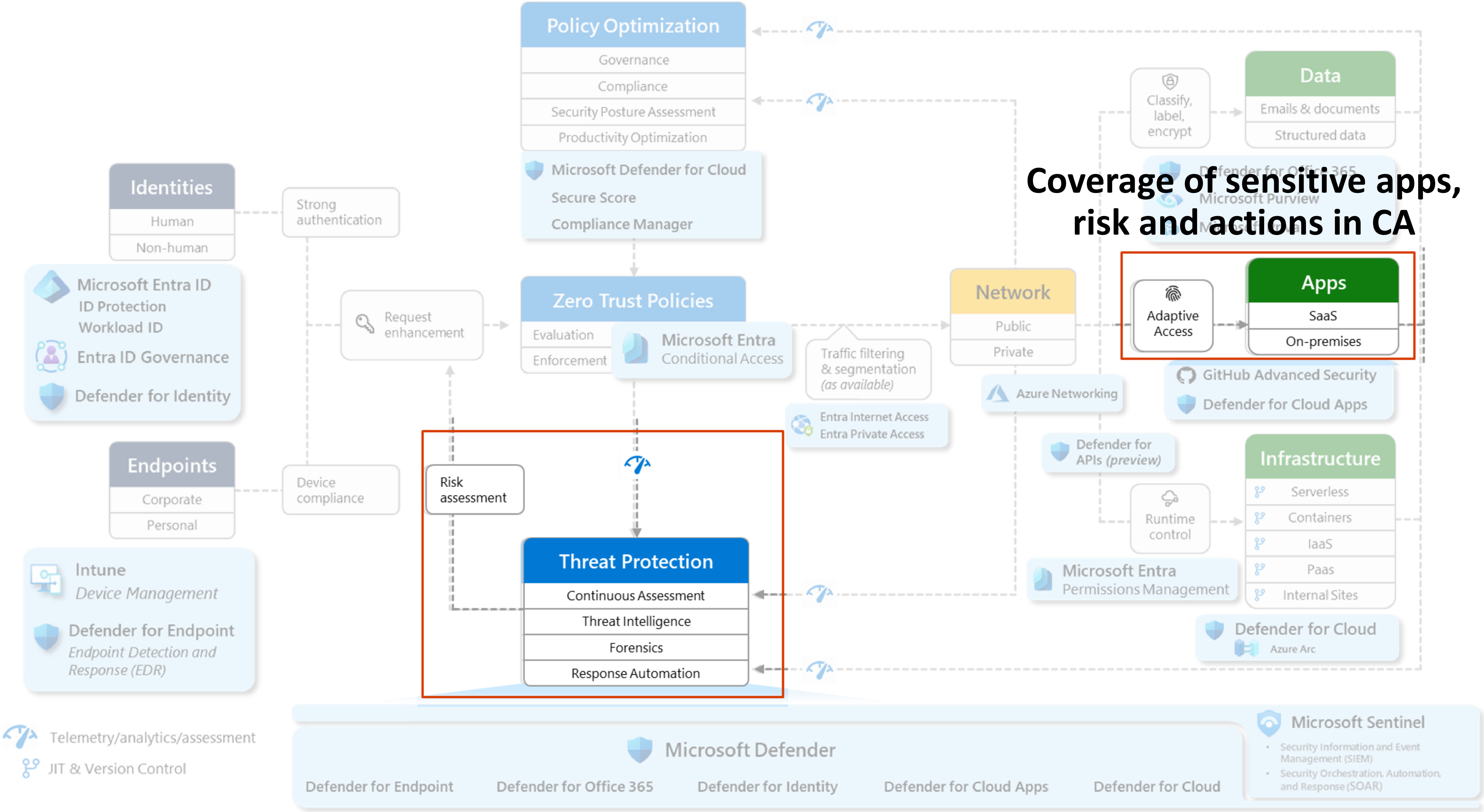
Coverage of sensitive apps, risk and actions in CA



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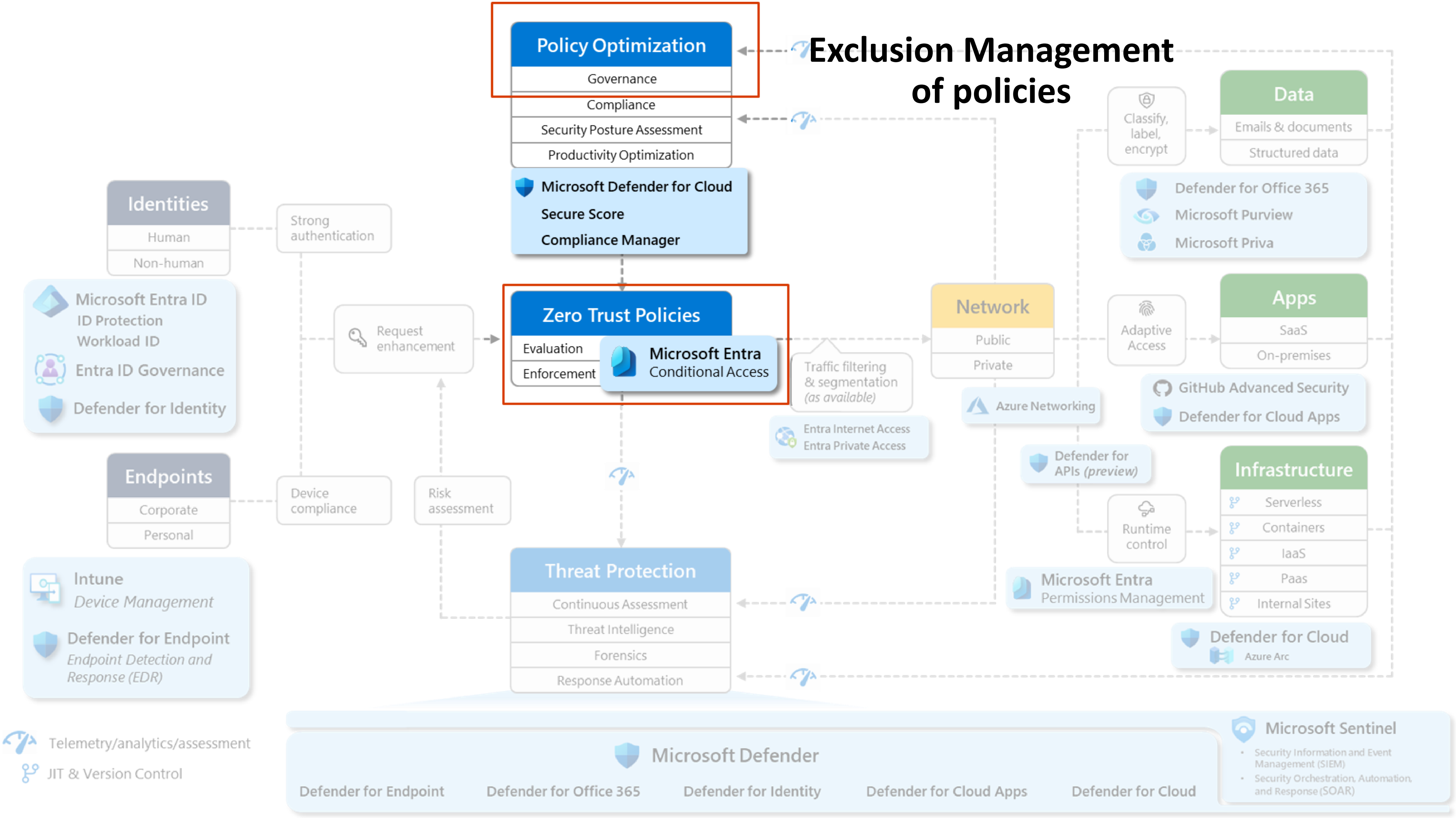
Exclusion Management of policies



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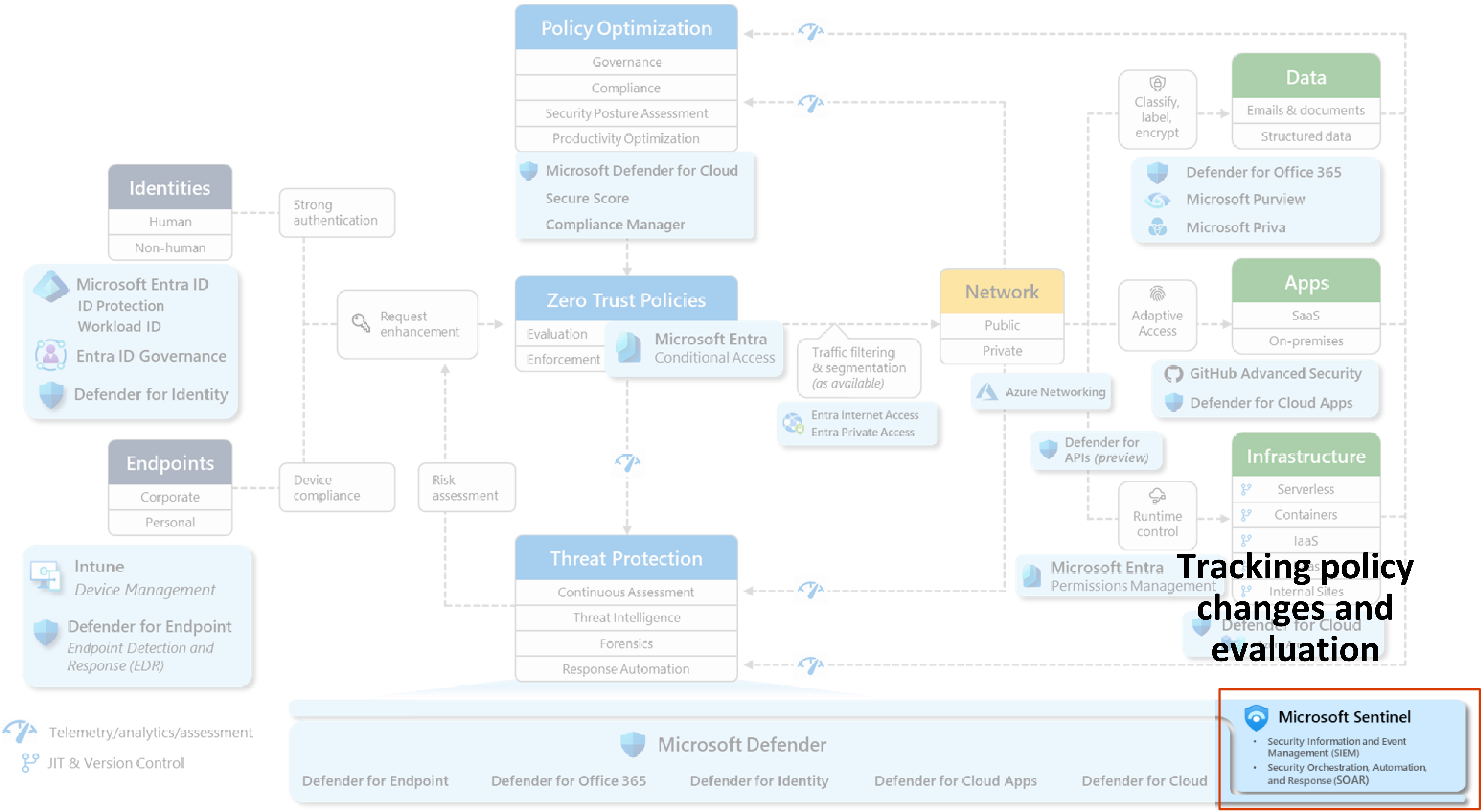

Tracking policy changes and evaluation

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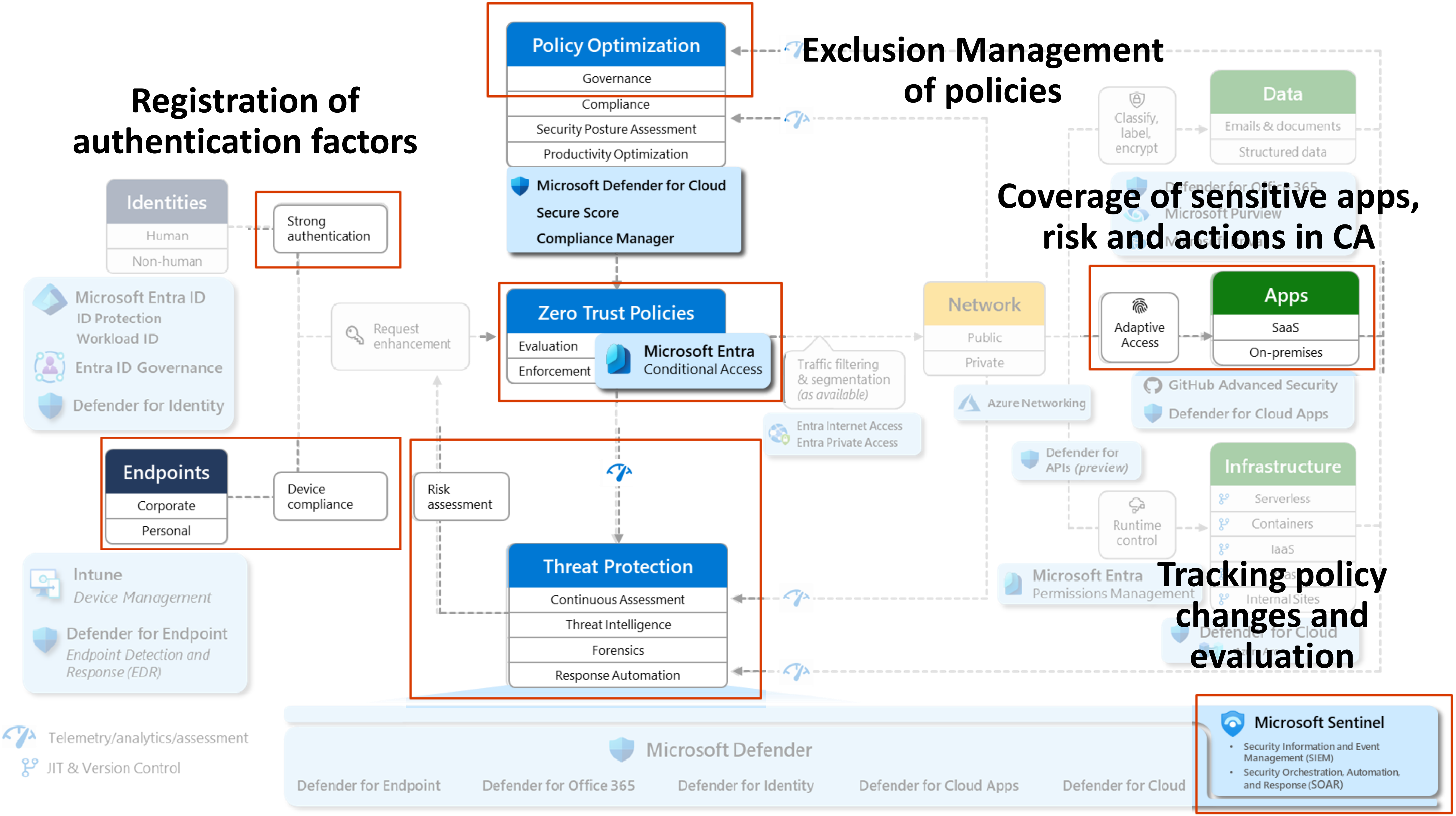

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AGENDA

- Registration of authentication factors
- Coverage of sensitive apps, risk and actions in CA
- Exclusion Management of policies
- Tracking policy changes and evaluation

Key takeaways:

- Do's and Don'ts in restricting authentication methods and flows by CA
- Attack paths and risks of weak operationalization of CA policies
- Importance of CAE and Session Management

Registration of authentication factors

Auth Factor Registration Maturity

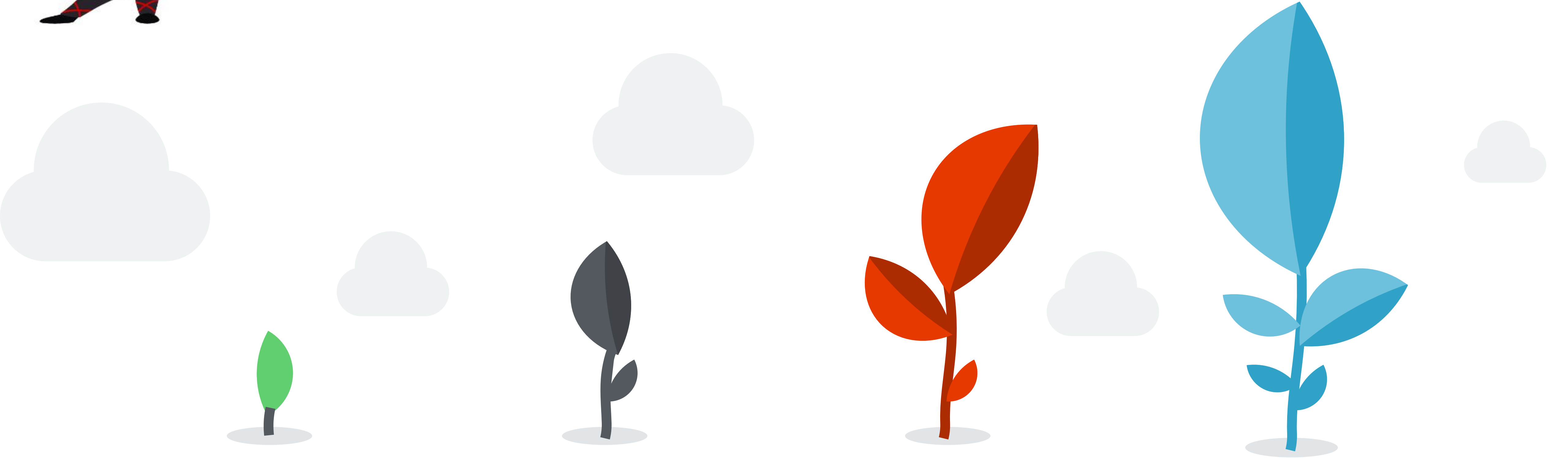
💻	Enforce MFA for Device Registration	Enforce MFA with SIF for Intune Enrollment	Block Personal Devices	Enforce TAP/FIDO2
🛡	Ask users to register MFA	Enforce MFA registration and usage	Restrict MFA registration to Trusted Devices / Locations	Make TAP a core part of your lifecycle processes

Demo: TAP Self-Service

Enable your users to request a Temporary Access Pass in a self-service portal

Coverage of sensitive apps, risk and actions in CA

Re-evaluation of Conditional Access



✓ Risk-based and User Action Policy

CAE for supported M365 apps and risk/critical events

Enforce Re-Auth by Risk Conditions or User Actions, Limited session lifetime

Require Re-Auth on sensitive app actions or context

Require Re-Authentication on sensitive cloud apps

CAE for location change by strictly enforcement

Demo: Sensitive Apps & Actions

Authentication context use cases and limitations

Acquired token and established sesssion from GSA client outside of compliant network

Exclusion Management of policies

Exclusion Management of User

Using ~~synced~~ cloud-only Security Groups for User Exclusion

Identity Governance Access Review of Exclusion Groups

Delegate management on exclusion group (on specific scope) to helpdesk or self-service (temporary)

Protecting security groups and manage exclusions with Entitlement Management

The Exclusion Management Dilemma

Role-Assignable Group

✅ Restrict group management to owner, Global and Priv Role Admin

✅ Can be managed by Entitlement management

‼️ Group member inherit the protection level of the group

Restricted Administrative Unit

✅ Restrict group management to dedicated role assignments

‼️ Can not be managed by Entitlement management

✅ No protection inheritance to the group members

Tracking policy changes and evaluation

Policy changes and monitoring

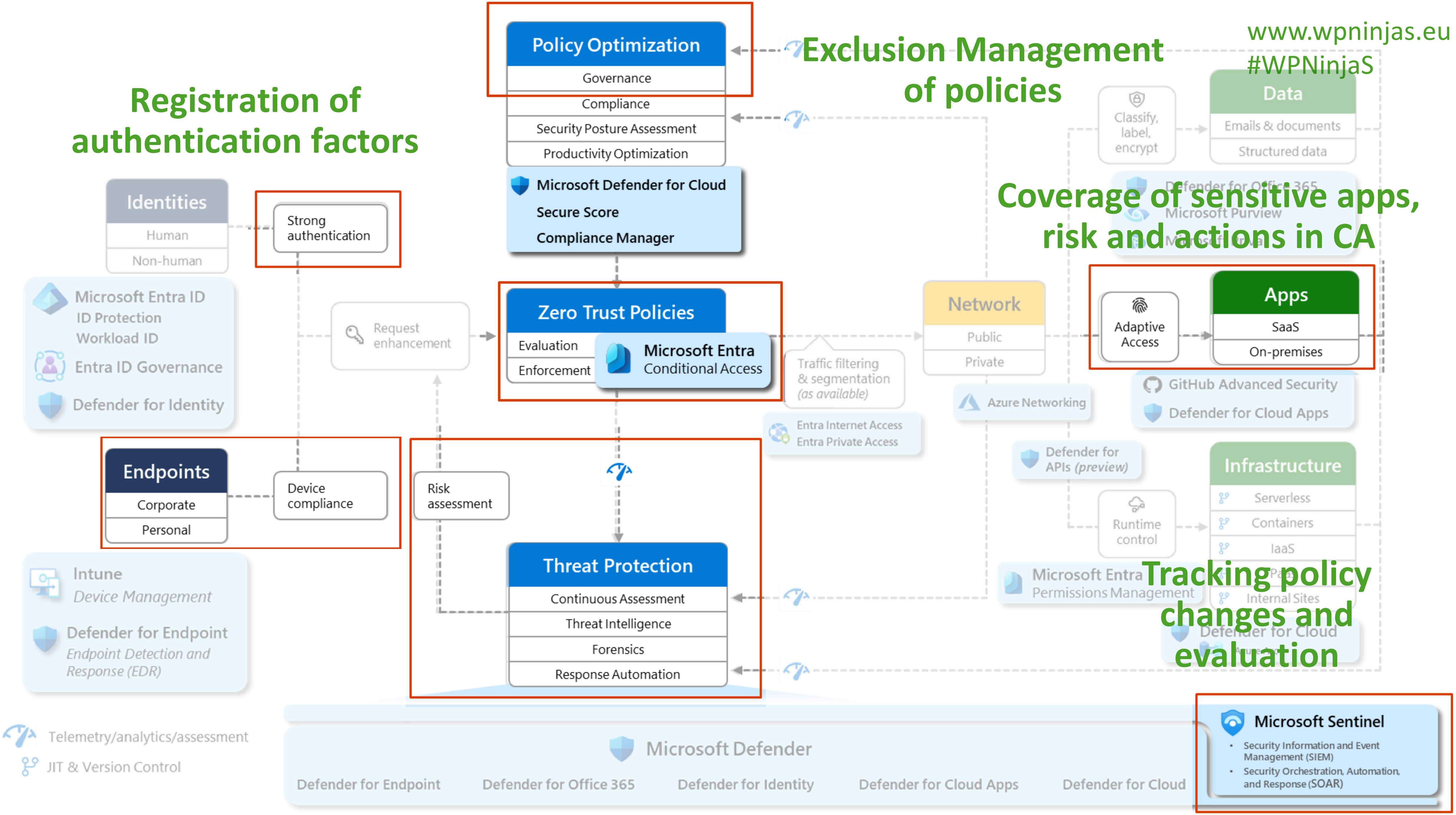
Enable sign-in logs and audit logs, using built-in workbooks (CA Insights)	Alert on policy change, comparison policy in Portal	Comparison of policy changes and effectiveness with community tools	Monitoring of CA effectiveness (e.g., Maester, KQL), alert on changes outside CI/CD
Manual modification of policy or using template	Duplicate and Import policy via portal	Export policies by using Graph API (e.g., EntraExporter)	“CA-as-Code” by using Terraform/Graph API

Demo: Advanced auditing & monitoring

Compare of policy change in UI portal

Community Workbooks for CA policy monitoring

Evaluation of Conditional Access configuration posture by Maester



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😀 Great Session!

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