

William Prado

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4A Authentication

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Cybersecurity Architecture: Who are you? Identity & access management.

IAM

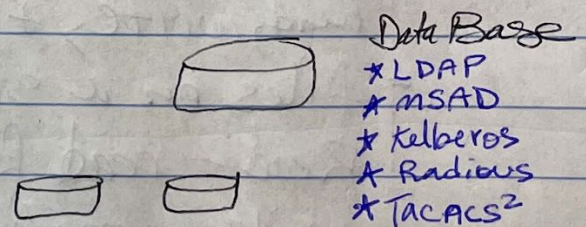
Identity - "Claim"

Authentication - "prove"

Authorization - "Rights & permissions"

Accounting -

Schema - is essentially a blueprint or structure that defines how data is organized, stored, and related within a system - most commonly in databases.



Resource

printers
files/folders
IoT
camera

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Identity Access Mgmt

Admin

Auth

Authz

Biometrics

FRR = false Rejection Rate

FAR = false Acceptance Rate

CER = Crossover Error Rate

professor messer

YTB - Biometrics acceptance rates.

IBM-YTB - Passwordless Authentication

IBM YTB - Fido

Open Authentication (OATH) - strong authentication

IBM-YTB Passwords vs Passkeys

Permissions File or Folder

- owner grants
- Users abilities to;
Read, write, + execute
- files on a system
- Read - read files
- write - make changes to a file
- execute - run a file

Rights anything other than File or Folder

- grants users to groups
- ability to perform specific actions on a system

YTB → Discretionary Access Control (DAC)

- who owns the resource.
- a user or group membership grants access

Access Control List -

chmod u=rwx,

Mandatory Access Control - based on "security clearance levels".

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YTB Mandatory Access Control (MAC) models

Attribute-Based Access Control - one can read, one ^{can change}
Ex: Two paralegals, one present & one intake...

GPO - edit local Group Policy Editor.

Privileged Access Management - policy, procedures, technical control prevent malicious abuse of privileged accounts.

Jeff Crume
IBM
YTB

Why you need privileged account management