STRONG AUTHENTICATION

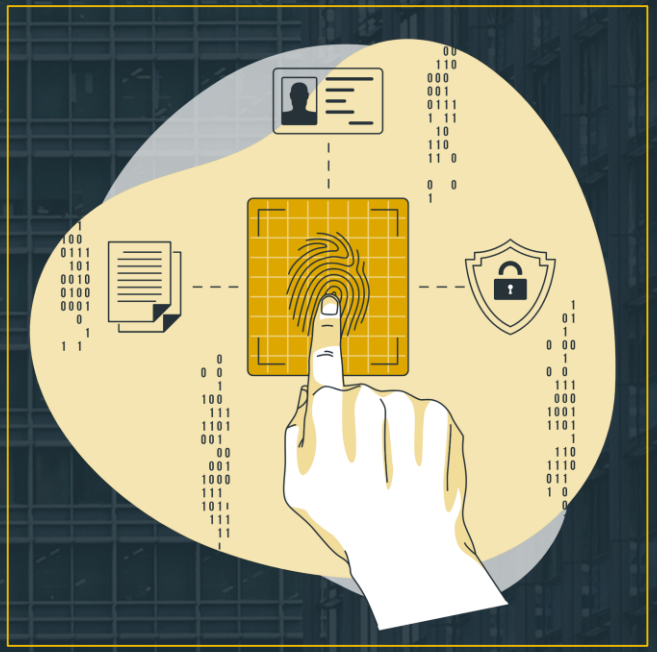
AUTHONTICATION IN WEB INDUSTRY

TABLE OF CONTENTS

01

INTRODUCTION

WEB AND AUTHENTICATION



WHAT IS ..?
AUTHENTICATION

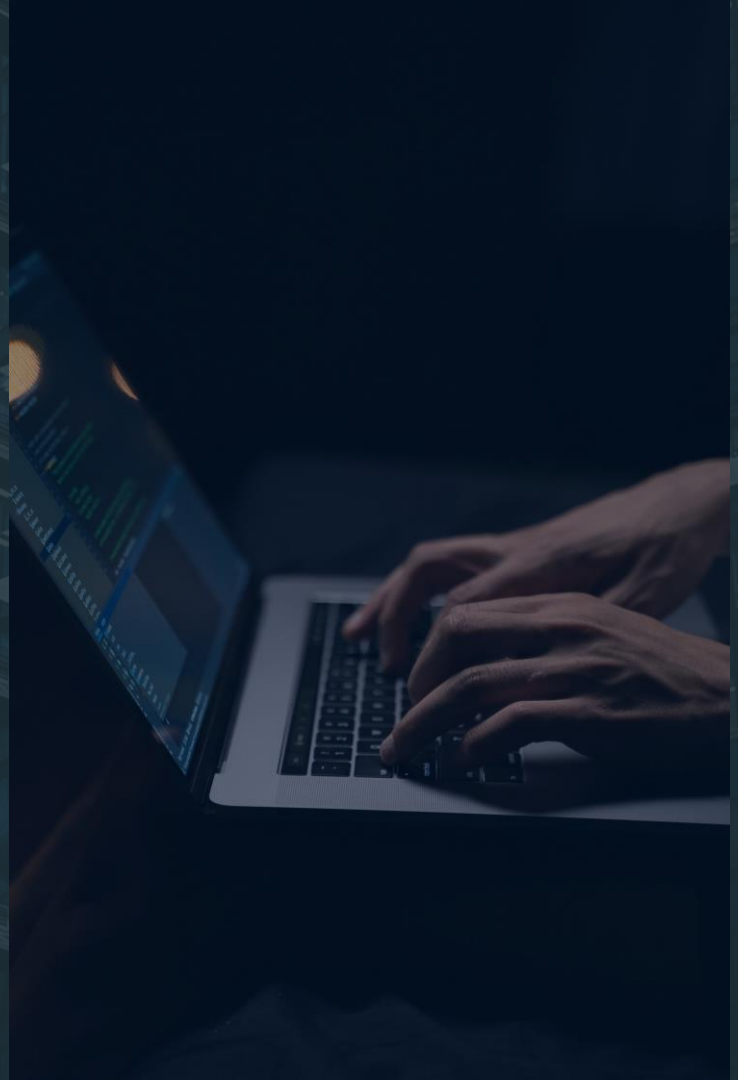
Authentication is the process of confirming that a user is who they say they are. This ensures only those with authorized credentials gain access to secure systems.

Authentication is part of a three-step process for gaining access to digital resources:

1. Identification: Who are you ?
2. Authentication: Prove it.
3. Authorization: Do you have permission ?

WHAT IS ..?

WEB ENV



02

AUTHENTICATION

- AUTHENTICATION IMPORTANCE
- AUTHENTICATION FACTORS
- AUTHENTICATION TYPES

02

AUTHENTICATION

- AUTHENTICATION IMPORTANCE
- AUTHENTICATION FACTORS
- AUTHENTICATION TYPES

AUTHENTICATION IN CYBER SECURITY

The importance of authentication in cybersecurity is paramount. Authentication serves as a fundamental element in any cybersecurity strategy, acting as a crucial line of defense against unauthorized access and potential security breaches.
Here are the key reasons why authentication is crucial in the field of cybersecurity :

ACCESS CONTROL

DATA PROTECTION

NETWORK SECURITY

SECURE TRANSACTIONS

AUTHENTICATION FACTORS

An authentication factor is a special category of security credential that is used to verify the identity and authorization of a user attempting to gain access, send communications, or request data from a secured network, system, or application.

KNOWLEDGE FACTORS

Something You Know

- Passwords
- Security Question
- Personal Identification Number PIN

POSSESSION FACTORS

Something You Have

- Smart Card
- Security Token
- One-Time Password

INHERENCE FACTORS

Something You Are

- Fingerprint Scan
- Facial Image
- Iris Scan

LOCATION FACTORS

Somewhere You Are

- Geo-Fencing
- IP Address Verification

AUTHENTICATION TYPES

01

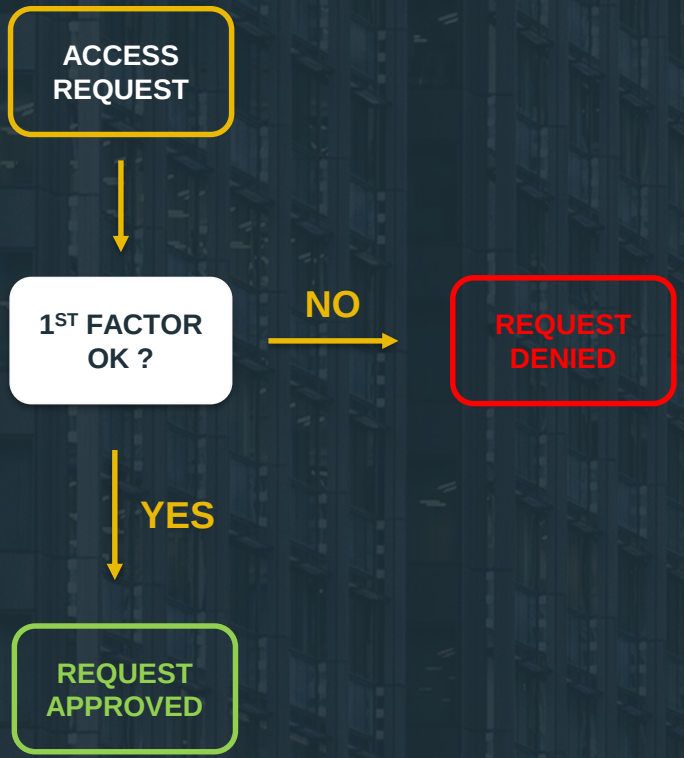
SINGLE-FACTOR AUTHENTICATION

02

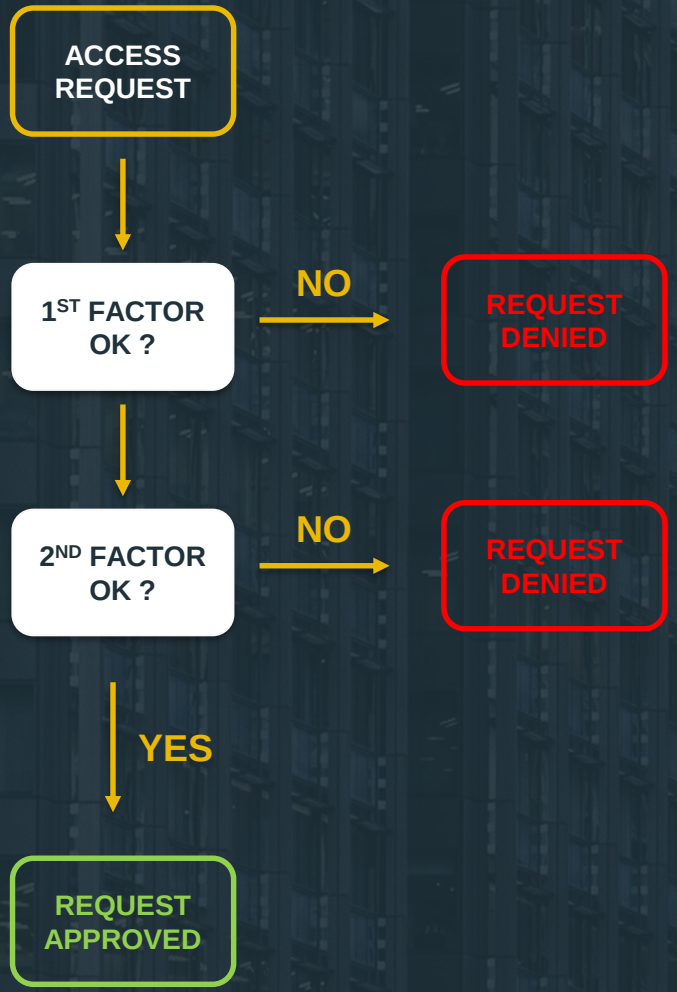
MULTI-FACTOR AUTHENTICATION

03

SINGLE SIGN-ON AUTHENTICATION

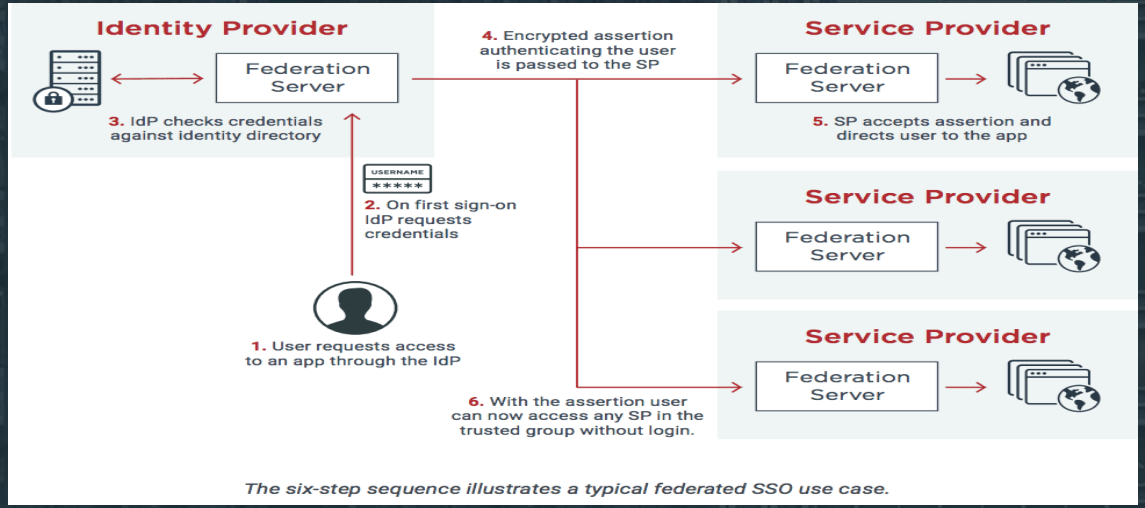


SINGLE FACTOR



MULTI FACTORS

S-S-O



The six-step sequence illustrates a typical federated SSO use case.

AUTHENTICATION PROTOCOLS

01 DIFFERENCE BETWEEN PROTOCOLS AND METHODS

02 FAMOUS AUTHENTICATION PROTOCOLS

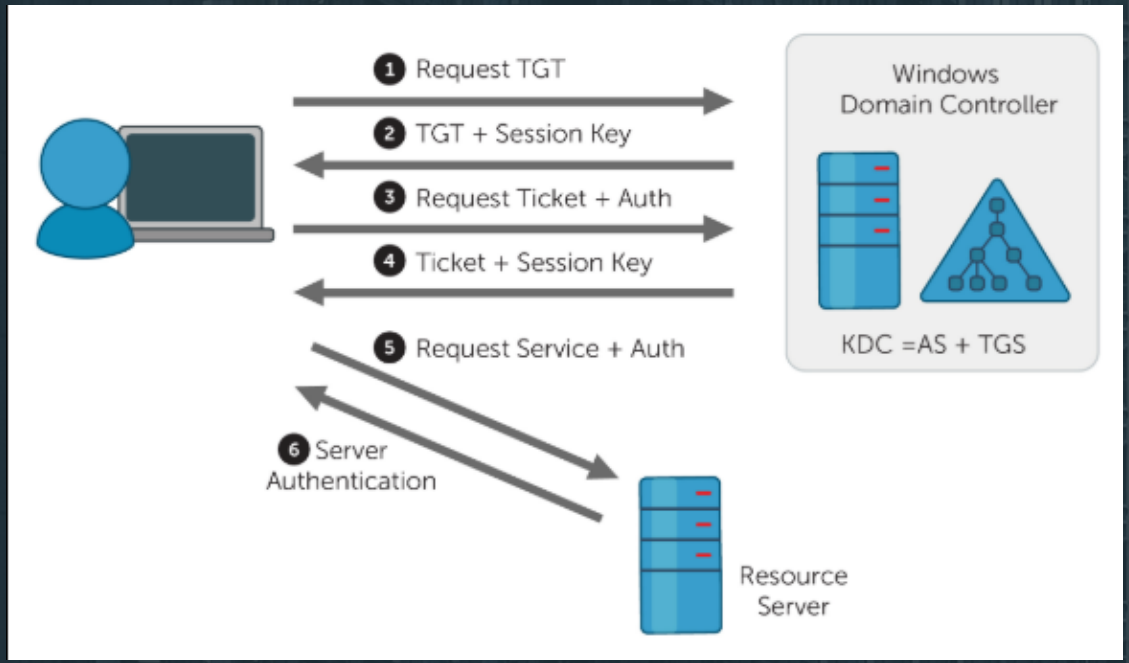
01 DIFFERENCE BETWEEN PROTOCOLS AND METHODS

Authentication methods are tools like 2FA, MFA, and SSO used to secure user identity. Authentication protocols form a broader ecosystem ensuring security and integrity in the authentication process, involving various elements to prevent unauthorized access. Protocols incorporate authentication methods for achieving a robust security goal.

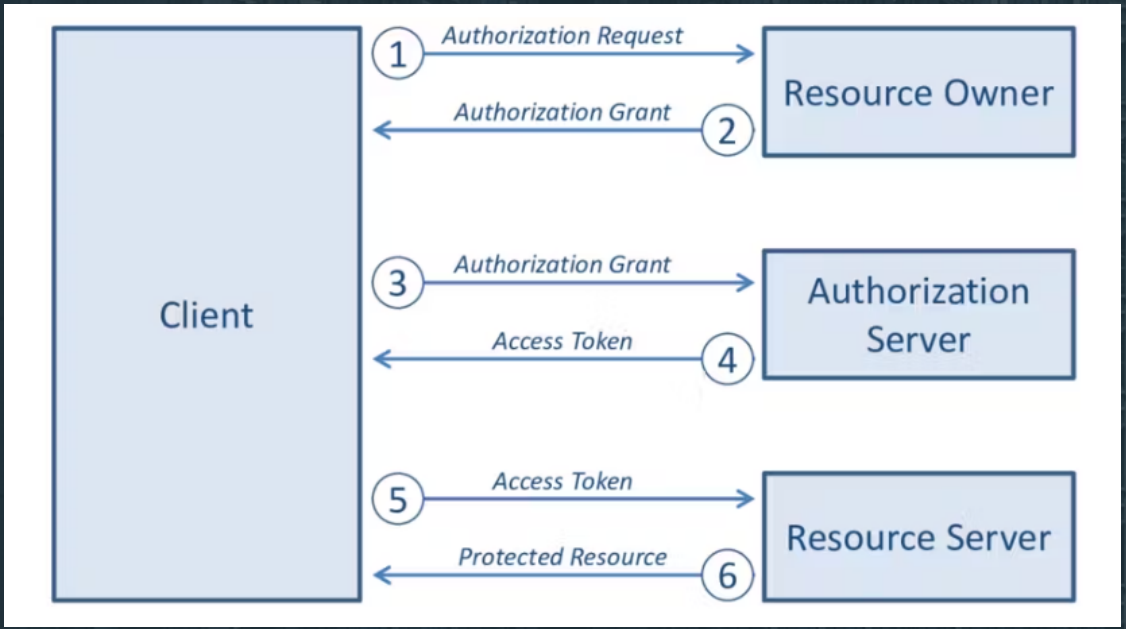
02 FAMOUS AUTHENTICATION PROTOCOLS

In this passage we will talk about some of the popular and widely used authentication protocols.

01 KERBEROS


1 Request TGT
2 TGT + Session Key
3 Request Ticket + Auth
4 Ticket + Session Key
5 Request Service + Auth
6 Server Authentication
Windows Domain Controller
KDC =AS + TGS
Resource Server

02 OAUTH2.0


Client
1
Authorization Request
Authorization Grant
2
Resource Owner
3
Authorization Grant
Access Token
4
Authorization Server
5
Access Token
Protected Resource
6
Resource Server

CONCLUSION

NOW IT'S TIME

FOR QUIZ

Q: AUTHENTICATION VS AUTHORIZATION ?

Q: A PIECE OF DATA THAT REPRESENTS USERS IDENTITY ?

THANKS


Q&A