ALFA 2.0 - the Abbreviated Language for Authorization

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I’m Mario
I’m 25
CANADA
UNIONE EUROPEA
REPUBBLICA ITALIANA

Canada Border Services Agency
Agence des services frontaliers du Canada
Border Inspection
Contrôle frontalier
Canada
Can I enter Canada to attend IETF?

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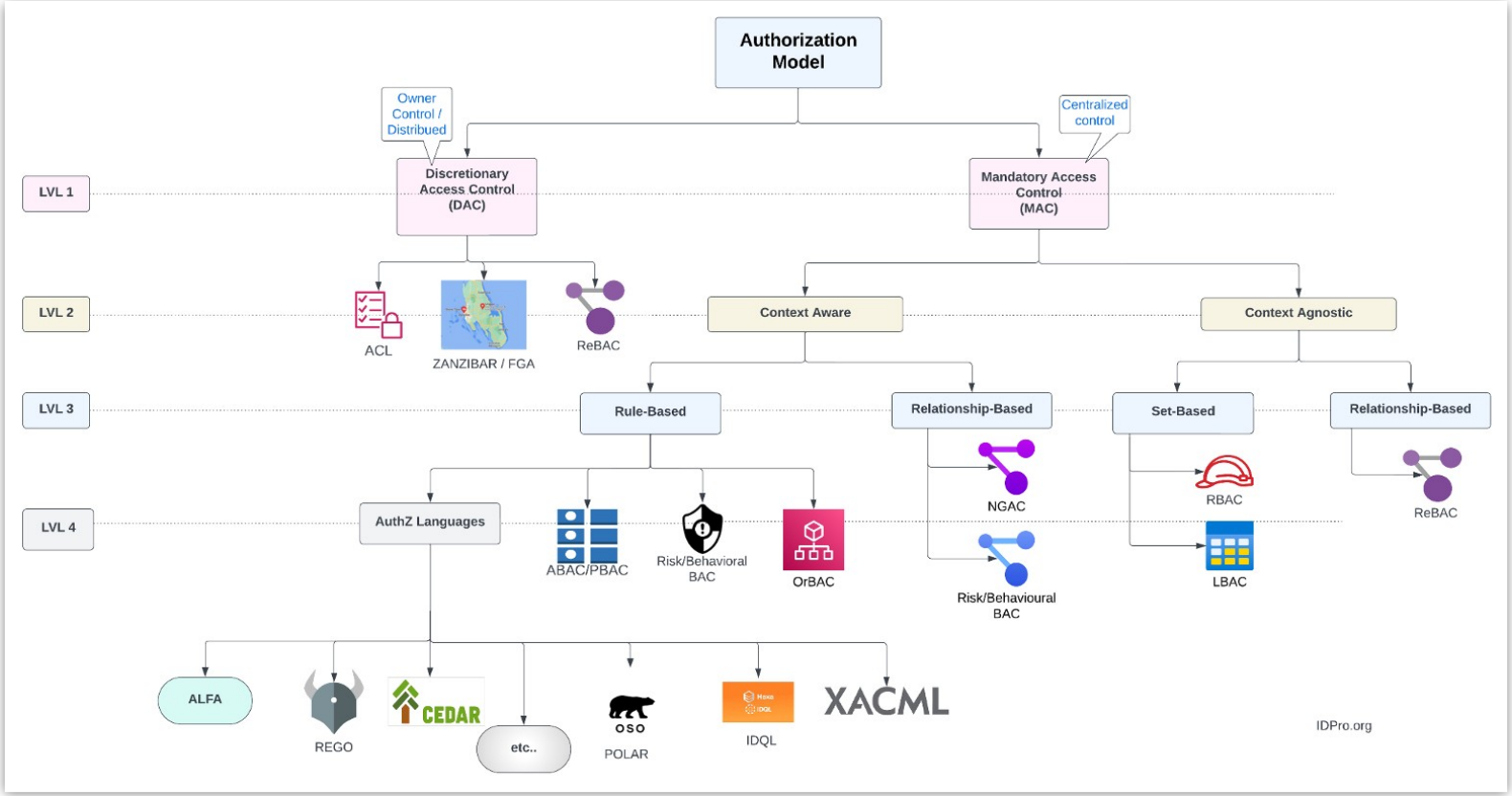
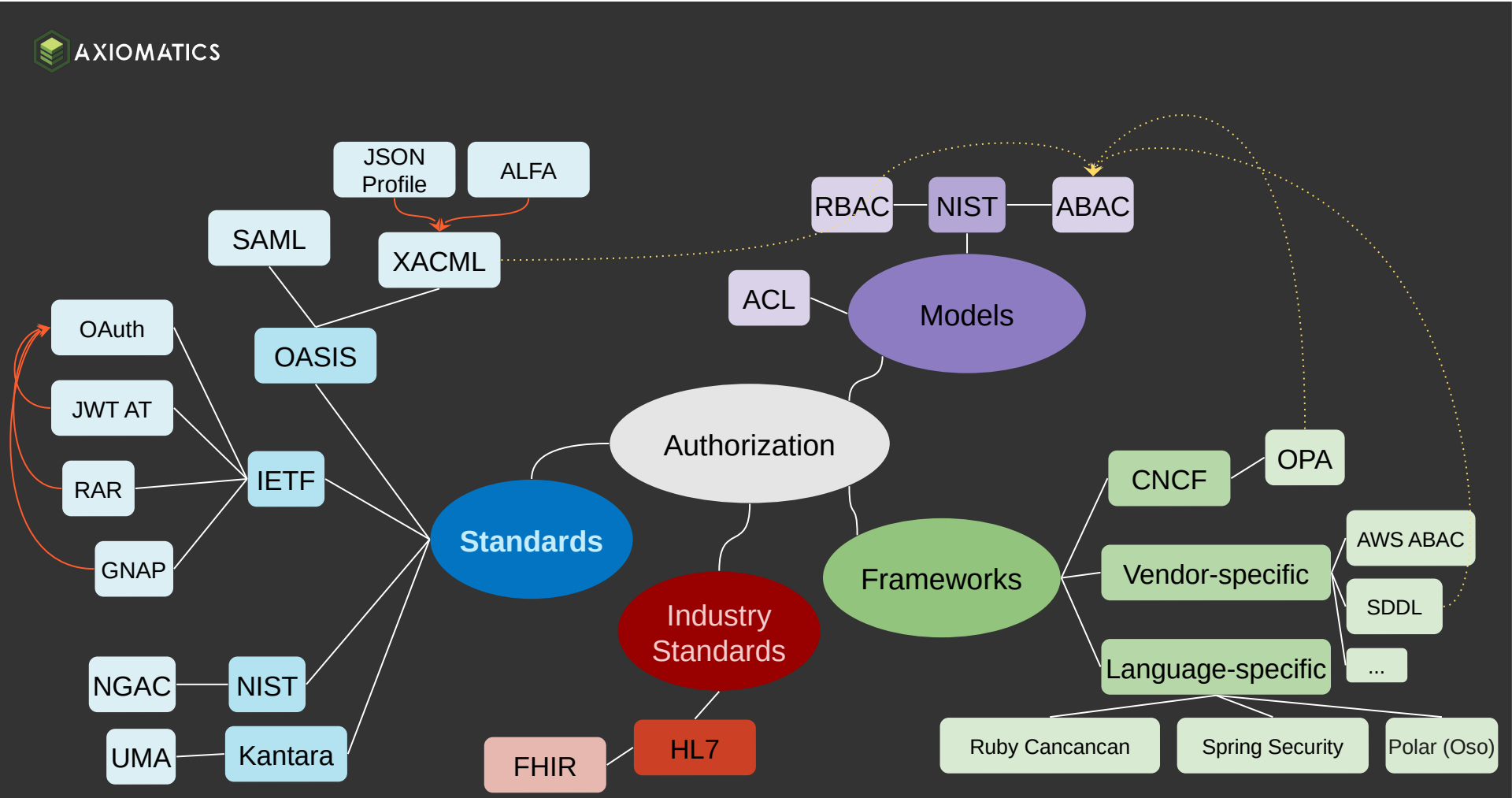
Authorization Models

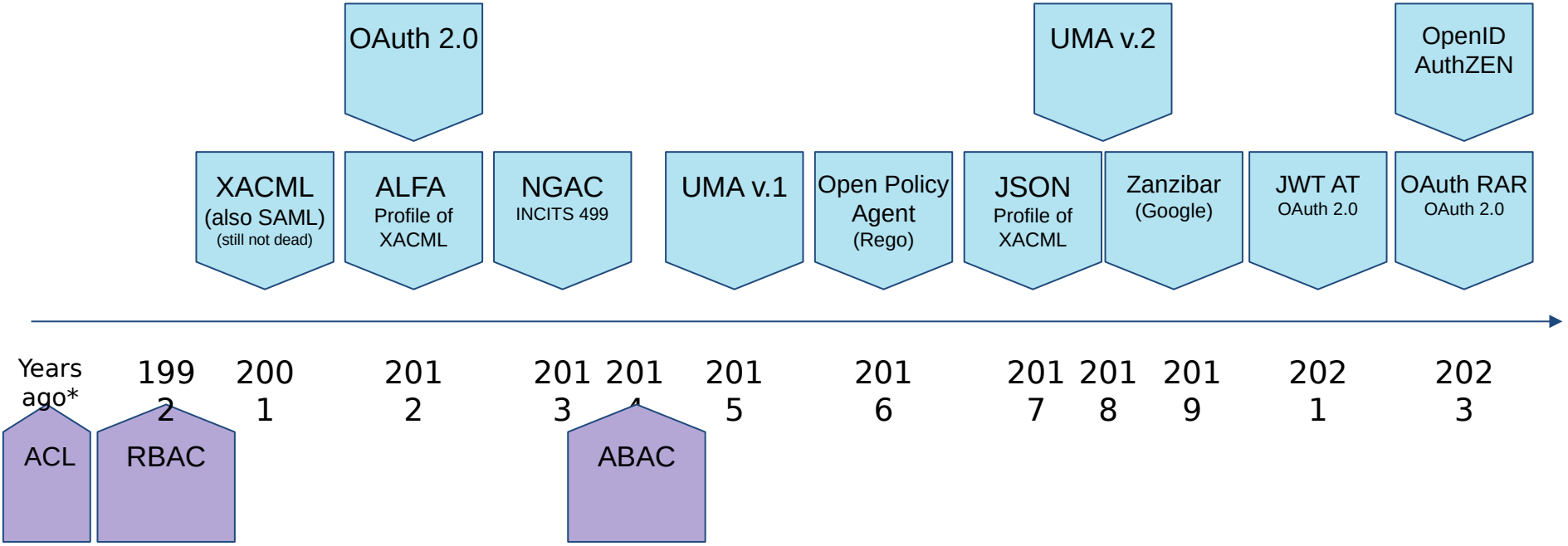


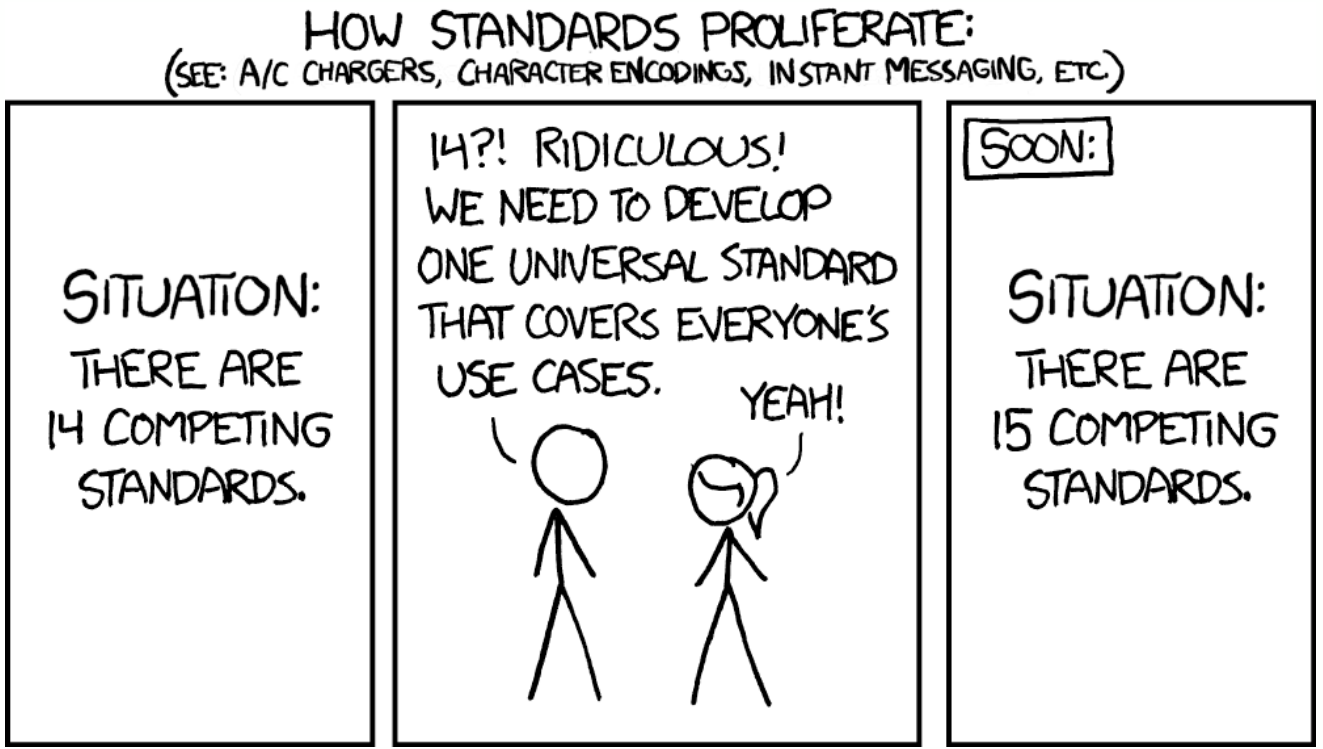
Credit: Alex Babeanu (3Edges | IDPro): https://idpro.org/a-taxonomy-of-modern-authorization-models/



Credit: David Brossard Axiomatics | IDPro): Identiverse 2021 - the Holy Grail of Authorization

Standards, Frameworks & Models Timeline





Source: [xkcd Standards]

What is ALFA?

- Abbreviated Language for Authorization
- Implements RBAC, ABAC, ReBAC in one single language
- Drafted under OASIS XACML in March 2014
- Aimed at developers
- All the goodness of XACML, (almost) none of the bad
- Strong uptake within XACML implementations

Who uses ALFA today?

Customers use it to write their policies

Salesforce uses XACML internally and ALFA to help write policies.

Thales developed the AuthZForce XACML 3.0 PDP as part of Fiware and released via an Open Source initiative called OW2. FIWARE is an open source cloud platform. ALFA is called out in official documentation.

Huawei R&D have been using ALFA for 5+years. They have a native C/C++ PDP that uses ALFA natively to evaluate policies, and a Usage Control (UCON) extension in the form of an ALFA profile that is used as a C/C++ library or via a GoLang service wrapper in various

Rock Solid Knowledge have been using ALFA for 5+ years. They have a native C# PDP that uses ALFA which is then "compiled to native". Their PDP is part of their IAM suite

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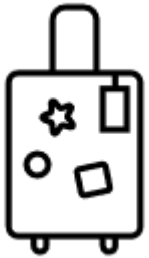
Why ALFA 2.0?



Get rid of the XACML Baggage

Strong need for standardized AuthZ

Promote reuse

Avoid Cloud platform proprietary options

Simplify ALFA

Who is interested in ALFA 2.0?

Note: This slide is not an endorsement of ALFA by the parties mentioned

Next Steps

Questions

- Should ALFA 2.0 be its own WG?
- Should it be part of OAuth? Other WG?

Useful links

- ALFA 2.0 - the Abbreviated Language for Authorization - draft RFC submission
- ALFA reference site: https://alfa.guide
- ALFA Slack Community

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Thank you