



**Authentication System
Protected Nerves**

Asc27 S.r.l.

IA StartUp that is innovative by vocation. Innovative from its Foundation, in its Foundations. With its operational headquarters and Development Team in Rome (IT), ASC27 s.r.l. has a SW Development Team, a Data Scientist and an Annotator dedicated to the branch of software known as Artificial Intelligence. Dealing with Deep Learning, Machine Learning, One Shot Prediction and Long Term Forecasting, ASC27 s.r.l. has gained experience and produced components of Patent Pending software in the areas of Cognitive Intelligence and Media Analytics. In each project it faces, the ASC27 Development Team brings at least 100 years of operational experience. << We create KNOWLEDGE >>. ASC27.





Authentication System Protected Nerves

Nowadays, the communication processes are extended in every context and at any level of the Society of Business, and they are covering almost every aspect of our daily routine. Considering the large adoption of communication tools in both individual and business life, we can consider them as the SPINE of mankind's evolution throughout this century. Having 5 BLN people connected worldwide poses many challenges to their communication security. In the last years, many protocols have been developed to guarantee the security of communications, like TextSecure for Direct Messaging, PGP for emails, SSL for web pages, and many others. Those protocols ensure that all these communications traversing the SPINE are secured against a third party that wants to abusively inspect or collect them. From a privacy perspective, it is really good news to know that 95% of the communication is now encrypted and considered safe.

However, how to be sure that the people involved in this so-called "secured communication" actually are the individuals who we think they are?

1



Group Auth

Authentication enforced by many and not by a single person or device.

2



Location

People are Auth only if they are exactly where they are supposed to be.

3



Backward

100% Compatible with FIDO2 standards.

4



More

Many unique features in a single system. The most safe and advanced Auth device in the world.





“Authentication processes, together with the people involved in activating them, are the NERVES of communication, the elements that enable communication itself, and one of the sources of information most exposed at adversarial attacks.”

AuthSPiNe protect theme

WHATEVER DEVICE

PROTECTED BY AUTHSPINE

This is the reason why we are introducing ***AuthSPiNe (ASPN, Authentication System Protected Nerves)***. We are proposing a new model to armor the communication Nerves, protecting them from hostile attackers before their conversations flows through the **Spine**.

Portable

Bring your Auth-Factor with you, wherever you go, wherever you are.

Keep it simple

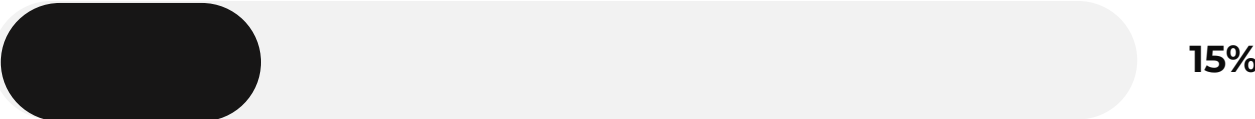
Use AuthSPiNe whenever you need, using simply your fingerprint to activate it.



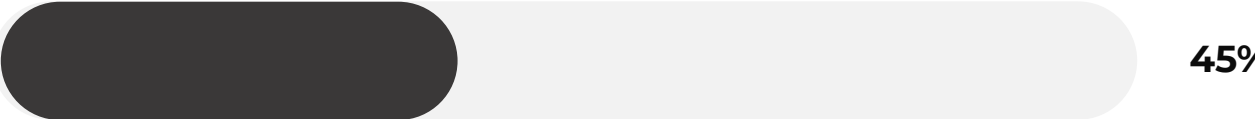


PROTECTION LEVEL

Username and Password



SMS-Auth



FIDO2-Auth



AuthSPiNe



FEATURES

AuthSPiNe VALUE

Here comes AuthSPiNe, with a novel method-proposal, to extend and weaponize the FIDO2 Authentication process. Hereinafter, a brief description of the capabilities and the techniques that AuthSPiNe will introduce in the FIDO2 scheme.

Enhancement of Trust during the Authentication process:

- Group Authentication Trust (People Level)
- Location Enforced Trust (Room Level)
- GPS Enforced Trust (Geographic Coordinates Level)
- Wi-Fi Enforced Trust (Wi-Fi Level)
- Multi-Device Authentication Chain Trust (Device Level)
- Behavioral Authentication Trust (Behaviour Level)
- Fingerprint and In-Presence activation Trust (Biometric Level)
- SmartCard or SimCard Authentication Trust (External Device Level)

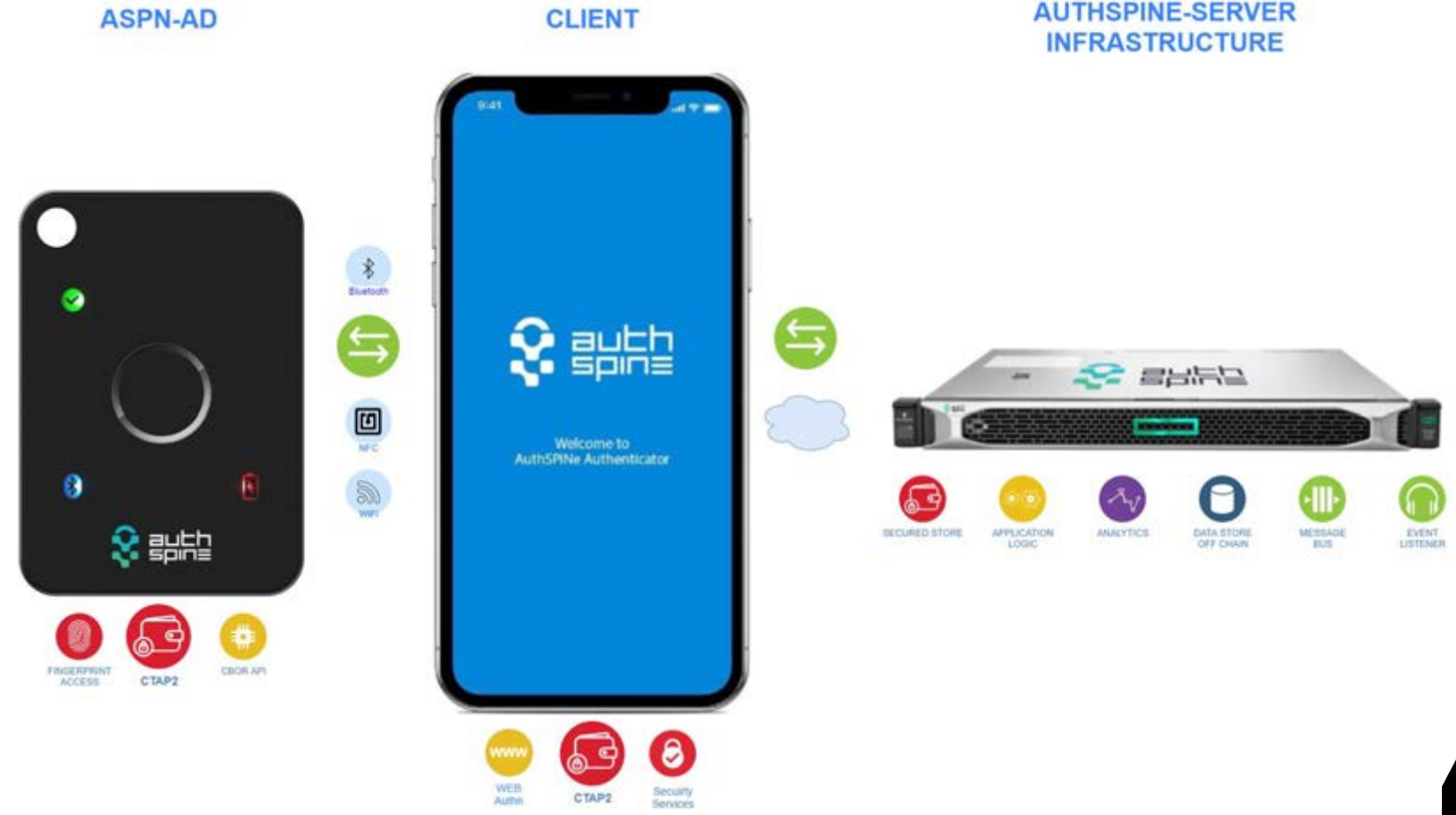
Ancillary features:

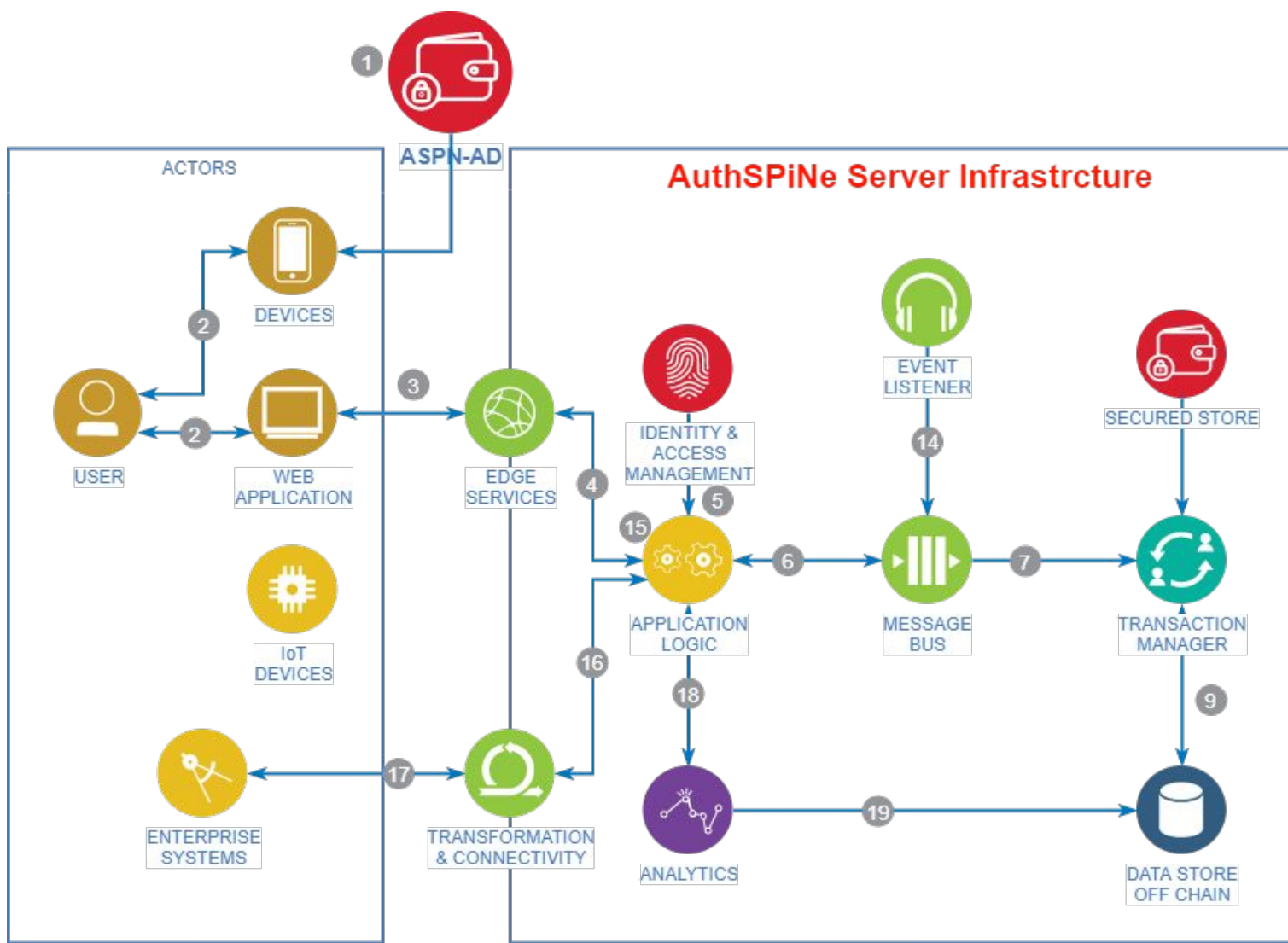
- Novel Key-Recovery Method
- Blackbox sensor-recorder for further analysis in case of incidents
- Loneliness Analysis
- On-Device Known CA and SSL Client-Server Mutual Authentication

“The components bringing AuthSPiNe to life”.



COMPONENTS





LEGEND

- Actors
- Application
- Infrastructure services
- Management
- Data oriented services
- DevOps
- Security



“AuthSPiNe architecture overview”

High-level components description.



Auth
Secure
d

**“The most
advanced
Auth-System
in the
world”**

AuthSPiNe

Authenticates what need to be
securely Authenticated.



Auth System

Trustily and Securely



CONFIGURABLE

Ready to fit any customer's needs, the technology could be 100% customized.



FUTURE PROOF

Wherever you are going, AuthSPiNe will be with you, now and in the future.



SECURE

Secured by Design, secured in its nature.



PERFORMANT

Ready to be audited. Enterprise and military-grade audit available.

ONE STOP SOLUTION FOR MANY ISSUES



KNOW WHO YOU ARE TALKING WITH

You will always know who is in the conversation.



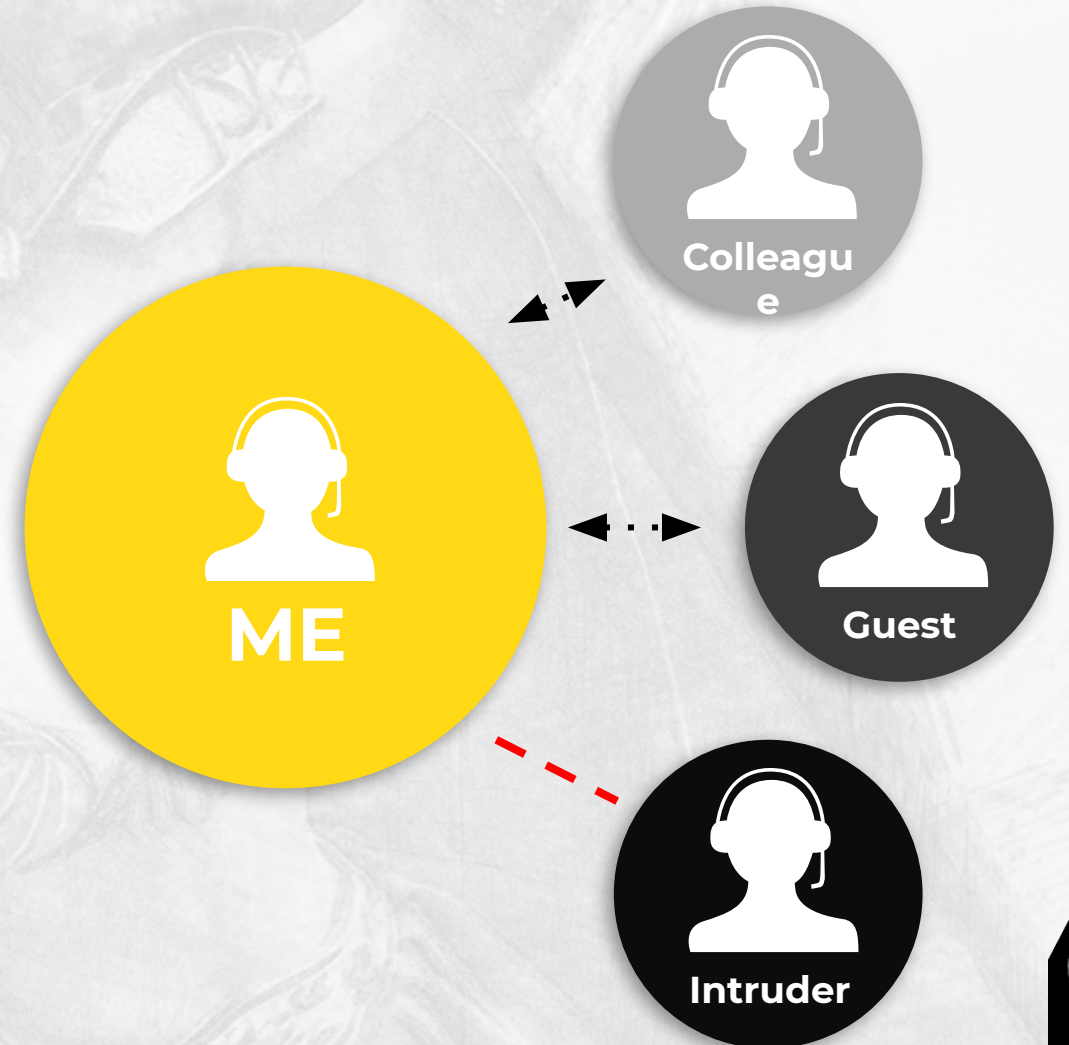
BE TRUSTED BY YOUR COUNTERPARTS

Involved people always have trust and confidence in speakers.



NO MORE INTRUSIONS

Keep out intruders, no more an issue in the conversation



**“One
technology,
many
versions.**

**Choose what
fits your
needs.”**

LARGE ENTERPRISES

AuthSPiNe could be used in large enterprises to enforce internal Authentication mechanisms. Leveraging on its backward compatibility with the FIDO2 standard, AuthSPiNe can be easily and swiftly integrated in Enterprise environments.

IDENTITY PROVIDERS

Business or Agencies that manage User identities for Auth purposes, as large email providers and GOV agencies that manage highly sensible and private data, could adopt AuthSPiNe to keep identities secure and avoid any spoofing activity on them.

MILITARY GRADE

Built for Top-Sec purposes, the MIL-Version of AuthSPiNe is on the PATH of Certification. Only certified hardware components, fully inspectable, and anti-tampering technologies on board in a single device. Dedicated features included.





**KEEP WHAT REALLY
MATTERS SECURE**

A detailed pencil sketch of a gladiator in a dynamic, forward-leaning pose, holding a spear. The drawing is rendered in shades of gray with fine lines and cross-hatching for shading and texture. The gladiator wears a helmet with a crest and a loincloth. The background is a light gray with some sketchy lines.

THANK YOU



ASC27

WEBSITE:

www.asc27.com

